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ORIGINAL ARTICLES.

GENITAL REFLEXES, THE RESULT OF AN ABNORMAL PHYSICAL CONDITION OF THE GENITAL ORGANS, KNOWN AS PHIMOSIS.

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It is well understood, by physiologists as well as practitioners, that in psycho-physical, and psycho-intellectual life, genital excitations play a very important part, and therefore it is quite as necessary and scientific to study these organs anatomically and physiologically, in all their relations and uses, as it is to study any other function of our physical being.

In medical philosophy, agreeably to the law of antecedents and consequents, such an investigation is certainly one of such importance, and involving so much, that we might regard it as one of the most interesting in pædiatrics. With the advances of science it is requisite to give attention to the abnormal physical development of the genital organs in childhood, and as something we cannot ignore, but must carefully investigate.

Dr. Luys† calls attention to the fact that "genital excitations may be arrested in their development by certain operations which nip them in the bud,"—*e. g.*, castration—and says the whole intellectual character is changed as a consequence of such an operation. This need not be further adverted to, for every one who has attentively observed the matter recognizes the changes made upon all the animal race after emasculation.

As physiologists, we must admit that the sexual instinct and the consequences resulting from gratified lust, and lust not gratified, have, from time immemorial, exerted the greatest influence and played a great part in the history of the world, and all mankind.

In the language of a classic Latin author, "Lust, before the time of Helen, had been the cause of most terrible wars."‡

Apologizing for this diversion, the lesion I wish to call particular attention to is announced in the heading of this article—an abnormal physical condition of the genital organs in children, that is exhibited by

an elongated or redundant foreskin; a condition that seems to have been well known and appreciated by our forefathers, who, with one accord, recognized the necessity of removing it, and the operation, as we shall show, is of great antiquity, and was practiced by the Egyptians, Jews, the inhabitants of Central America and Mexico, as a religious rite.

The objective point of the above is earnestly to make a plea for introducing anew to the profession a little operation that has fallen into disuse and neglect—an operation that was made thousands of years before the Christian era. The operation is one often mentioned in the Holy Scriptures, of both Old and New Testament. It is circumcision.

The last line of that sacred hymn appointed to be sung in the Episcopal church on Good Friday, after recounting the sufferings of our Saviour, and the last scene before his death, reads thus: "And Jewish rites no more remain." It is probable that the composer of this hymn regarded all the Jewish rites as either ceremonial or superstitious, and that there was no reason why any one of them should be retained. He little knew the physical import of the rite of circumcision.

Circumcision, as practiced by the Jews, was believed by them to have originated with our father Abraham, who was commanded by God to circumcise himself and his whole household, and to hand down the rite to his seed. It was ordained to be the token or seal of the everlasting covenant between God and his people. (See Genesis, chapter xvii., 9-14.)

We read in Exodus, iv., 25 and 26, that when Moses was returning from Midian to Egypt, he was in danger of his life, owing to the neglect of the rite of circumcision in his family. "Then Zipporah took a sharp stone and cut off the foreskin of her son, and cast it at his feet and said, Surely a bloody husband art thou to me." In Joshua v., 2-9, Joshua is said to have circumcised the children of Israel a second time with "knives of flints." In Ecclesiastes, chapter i., 9, it says, "And there is no new thing under the sun."

As regards circumcision, this is true, for it seems to have been practiced for centuries, and the "chosen people" of God still enforce it. Circumcision is an operation older than Hippocrates, Galen, or any one of the fathers of medicine. Herodotus says, "Circumcision was already common in Egypt as early as the fourth dynasty of kings," 3427 B. C.

* Written for a work now in process of preparation by Dr. Edmonds of St. Louis.

† "The Brain and its Functions," p. 287. Appleton, N. Y., 1882.

‡ "Jam fuit ante Helenam cunnus teterrima belli causa."—PLINIUS.

Aristotle, two thousand years ago, said, "probably all art, and all wisdom, have often been already fully explored and again quite forgotten." And this assertion of Aristotle seems to apply to circumcision, which was commonly practiced among people widely separated from each other and of the most diverse tongues, people that could have had no connection with Egyptians or the Semitic race; and that it should have been in use among the Abyssinians, Kafirs, Arabians, tribes of Australians, South Sea Islanders, the Aztecs, and others, but neglected and "forgotten" by the Christian people of modern times, is most remarkable, and confirms the wisdom of the oft-quoted aphorism of Aristotle. One historian, Chambers, says, "Circumcision can be traced in one unbroken line from China to the Cape of Good Hope."

To the credit of our profession, it has remained for an American physician to call attention to the necessity of again availing ourselves of this ancient operation. It may be confidently asserted that the retention of the rite in question by the Jews, as practiced upon their children, has to that race been most salutary in the prevention of disease. From the precedents and facts adduced, it may be justly regarded as a boon in therapeutics, and is an operation not to be despised or neglected by Christians.

It is asserted that the Phœnicians practiced circumcision, and that the followers of Columbus were astonished to find it common among the inhabitants of the West Indies, in Central America and in Mexico.

Palatio relates that at Azori, in Honduras, the natives circumcised their children before an idol called Icelca.* Lord Kingsborough states that the Central Americans used the same rite, and McKenzie says he saw the same ceremony performed by the Chippeways. Reflecting upon these facts regarding circumcision, it would seem that *there must have existed some valid reason* for a rite and ceremony so ancient and universal, and one adopted by nations so widely separated, on different continents, and with religion, manners and customs so diverse.

PHIMOSIS.

Phimosis, from a Greek word signifying to bind, is a term used to express a preternatural elongation of the prepuce, with a contraction at its orifice to a degree rendering it difficult, and, in many instances, impossible to uncover the glans penis, or draw the prepuce completely back to the cervix. Associated with the above-described condition there is often a shortening of the frænum, and adhesion of the prepuce to the glans, to a greater or less extent. It is readily seen that an undue smallness of the preputial

orifice will materially interfere with an easy and cleanly micturition. This last-named condition not only presents an obstruction to the free passage of urine, but confines the secretions of the part so as to produce uncleanness, and the formation of caseous matter, and finally smegma, that in time will cause serious local irritation, sometimes simulating symptoms of stone in the bladder. When phimosis occurs in children it is almost always congenital; in adults it may be congenital or acquired, the latter variety being the consequence of disease, such as balanitis, gonorrhœa, or chancres.

In a work upon pædiatrics we have specially to deal with phimosis as a congenital affection, and it is to be remarked that it is frequently hereditary. Many medical men regard phimosis as trivial, but we assure them when they come to carefully examine the matter they will become convinced that it may be an exciting cause of many important affections.

Dr. Sayre, of New York, less than ten years ago, made the apparently radical statement that certain nervous diseases in childhood, of a grave nature, are the result of reflex irritation, produced by abnormal physical condition of the genitals. In other words, he asserted that phimosis in boys is liable to set up an irritation upon the glans penis that may be transmitted to the brain, and in time result in various ataxic conditions of the excito-motor and sensory nerves.

Dr. Sayre also stated that, in girls, an enlargement, hypertrophy, irritation, or hyperæsthesia of the clitoris or nymphæ* may cause certain derangements that are liable to be followed by reflex irritation of the brain and spinal cord; and the existence of these causes from long-continued and persistent action, may so influence the great sympathetic nerves as to excite irregular muscular contractions that manifest themselves by a loss of co-ordination and controlling power in the system.

Girls at the age of from nine to twelve are liable to nervous affections, with derangements of the appetite and digestion, often accompanied with twitching of the muscles, and eventually St. Vitus' dance. In boys afflicted with the same disease it is found that phimosis is frequently the cause, and so grave an affection as chorea, caused by reflex irritation, is certainly a serious matter. The pathology of this affection is not thoroughly understood, it being regarded as a neurosis by some, as rheumatic by others, still others suggesting that it is a heart com-

* It is well known that circumcision is performed upon girls among several races of half-civilized people, e. g., among the Nubians in Africa, and others. This has been done by practicing ablation of the nymphæ. In the latter part of this essay I have quoted from Dr. Barwell, of London, who, in giving the statistics of hip-disease in girls, says he found "the nymphæ protruding and covered by a cuticular surface." Verily, uncivilized people seem to have had physical reasons for some of their ceremonial rites and empirical practices.—T. G. C.

*" Atlantis, the Lost Continent," by Donnelly, page 151.

plication, and finally, one authority defines it as an "insanity of the muscles." Surgeons and experienced practitioners know that fissure of the anus sometimes sets up such irritation in the brain as will bring on a species of phrensy. This abnormal state of the mind subsides as soon as the fissure is cured, which can be done by a slight surgical operation. As chorea in boys, when accompanied by phimosis, sometimes results in partial paralysis, it would seem timely for the profession, with the lessons of experience and the advances of science, to wake up to the fact that the genital organs of the male, as well as those of the female, when abnormally developed, are liable to be attended by serious lesions and complications, such as we shall call attention to.

It is a principle well known and conceded, that abnormal stimuli, acting upon the genital organs of a child, male or female, may actively disturb their functions, and locally affect other organs, such as the bladder, rectum, testes and ovaries; and long-lasting peripheral irritation may, in time, be expended upon the whole cerebro-spinal system and nervous centres, producing serious results to distant organs. From the above statements, it would seem that it is the duty of a medical man when attending a child that shows symptoms of nervous affection, or exhibits any imperfect mental development, to examine the genital organs, and if phimosis, or other abnormal conditions exist, they should be treated surgically.

It is a fact well known to physicians, that adults having an extreme narrowing of the prepuce, to such a degree as to render it impossible to uncover the glans penis, suffer an effectual bar to the pleasure of sexual intercourse, and furthermore, that the operation of simply slitting up the prepuce removes the difficulty, so that the sensibility of the glans, not previously existing, will in a short time be developed to its normal extent.

DISEASED CONDITIONS ATTENDANT UPON THE EXISTENCE OF PHIMOSIS.

The following affections of children may result from phimosis: enuresis, paralysis of the bladder, wetting of the bed at night, balanitis, lithuria, pyelitis, prostatic enlargements, cystitis, night terrors, sleeplessness, fretfulness, indigestion, priapism tending to masturbation, epilepsy and epileptoid spasms, mental weakness verging upon idiocy, insanity, trismus nascentium, neuralgia, hysterical conditions, pruritus; eczema, and other refractory diseases of the skin; paraplegia, convulsions, infantile paralysis, morbus coxarius, incipient spinal curvatures, spasm of the ciliary muscles, club-foot, knee-joint affections, strabismus simulating astigmatism, and lastly, hernia.

In adults, phimosis sometimes occasions spermatorrhoea and aspermatism from constriction, chronic

balanitis, enlargement of the prostate, and affects the mental organization.

Regarding elongated prepuces, the editor of the *Philadelphia Medical and Surgical Reporter*, vol. 50, page 603 says: It was remarked by an old janitor of the dissecting room—the resurrectionist—of the University of Pennsylvania, that "every man with an elongated prepuce, had a cheese factory at the head of his penis," by which he intended to convey the idea that the accumulation of a caseous secretion within an elongated prepuce on the glans will, in the course of time, be liable to become consistent and form smegma, and of course produce a diseased condition there. If the elongated prepuce did not exist, the cause of such troubles would not have been present.*

As the existence of hernia in children is something not infrequent, I shall take the opportunity to quote from the *British Medical Journal*, 1881, vol. 1, page 427, the following from Samuel Osborne, M. D., F. R. C. S., London: "Having, in my capacity as surgeon to the Surgical Alliance Society, to examine many cases of hernia, and apply some hundreds of trusses in the course of the year, the frequency of phimosis in combination with rupture in infants has struck me repeatedly, more especially of late, as I have had no less than ten cases in which I am certain it was the undoubted cause of the rupture, and may be thus explained: After the descent of the testicle into the scrotum has been accomplished, the vaginal process of the peritonæum, through which it descends, begins to close, and become converted into a fibro-cellular cord. But the testicles having but lately descended—the left coming down between the seventh and eighth months of foetal life, and the right between the eighth and ninth months, the uniting medium is yet young, and not being sufficiently organized, is easily broken down by any strain thrown upon it. Phimosis occasions that strain from the impediment which it offers to the outflow of urine; extraordinary force is called into action, and this is effected by the contraction of the abdominal walls pressing upon the bladder, while the diaphragm is also, at the same time, in a state of tension, and by this means pressure is exerted over the whole of the abdominal wall, and the apertures by which the testicles have descended to the scrotum being always the

* In the report of the post-mortem examination of the assassin—his name we hold in abhorrence, and will not mention—who murdered our late lamented President, Gen. Garfield, it was stated, "The penis showed that there had been erection and emission; there was also a tight prepuce with adhesions and abundant smegma." In this peculiar case, most probably the abnormal condition of the man's genitals might have had something to do with his depraved and vicious mental development, and which made him a victim of a peculiar psychosis that led him to commit a great and unpardonable crime.

From what we know at this present time, may we not conclude that if circumcision had been made upon this man when a child all of his viciousness might have been lessened, and the consequences of that memorable murder been averted?—T. G. C.

weakest points of the abdominal surface, naturally give way under the strain thrown upon them. In other words, the child straining to pass his urine, forces the abdominal contents downward upon the weak points at the inguinal canals, and rupture on one or both sides results." I would go still further than this, and say that the canal which has been the last to close, or, in other words, that side on which the testicle was the last to descend, is the side on which we have the rupture occurring; and knowing that the right testicle is the last to descend, we naturally find that hernia in infants is also most frequently observed on this side.

"That the rupture occurs on the side on which the testicle was the last to descend, is only what one would suppose, for the uniting medium, which is effecting a closure of the canal on this side is not in so advanced a condition of organization as on the other, where the testicle is first to take its place.

"It is thus easily seen how a single truss frequently produces a double rupture. The cause of the obstruction to the outflow of urine is still present in phimosis, and one inguinal canal being guarded by a single truss, the abdomen gives way at its next weakest point, namely, the other inguinal canal, and a double rupture is the consequence. *Such a result might have been prevented by early circumcision.*"

From the above experience, from so high an authority, it must be conceded that the little operation of circumcision, as still practiced by the Jews, is, without doubt, salutary in its general consequences, and especially prophylactic against hernia, as well as many lesions of a serious nature.

It is well known that the Jews, as a race, are remarkably free from syphilis;* soft chancre is, however, believed to have been one of the plagues of the ancients, but the removal of the foreskin was certainly a great protection against its propagation. Self-pollution, or masturbation, in children, is a prolific cause of nervous diseases and derangements affecting their intellect, making them timid, shy, and is believed to predispose them to paralytic affections. Indeed, this vice, practiced throughout childhood, has been regarded by some observers as one cause—certainly an exciting one—of insanity in after life. Case after case of nervousness in children, sleeplessness in young infants, where a redundant prepuce was found to exist, have been benefited by an operation to relieve the same. I am now simply giving my own experience.

An objection has been raised against removal of redundant foreskin, by the lay people, from a belief that it tends to extinguish the virile power. This is utterly false. Just the opposite is true. Take the Jews as an example; they are the healthiest race in

existence, and their virility is remarkable, impotence among them rare, with remarkable exemption from insanity and nervous diseases, and their general health and longevity may, in no small degree, be attributable to the fact that they still at the present day practice circumcision.

It is conceded that a "modification of peripheral organs will modify central irritation,"* and, in accordance with this principle, we resort to circumcision. The operations that we have practiced and recommended are three:

First. Circumcision.

Second. Dilatation. (Sufficient to uncover the glans.)

Third. Incision.

CIRCUMCISION.

With a redundant and elongated prepuce this operation is preferable. The surgeon may perform it as follows:

For quite young babies no anæsthetic is required, but for children three years old or more, ether or chloroform should be given. Two assistants will be required, one to administer the anæsthetic, the other to assist the surgeon. It is generally preferable to have the family out of the room. The surgeon takes the end of the prepuce between the thumb and index finger of his left hand, or he may use a dog-tooth forceps, and draws it forward, so that the portion that corresponds to the corona glandis shall be stretched entirely in front of the penis. Then taking a narrow-bladed forceps he applies it to the prepuce in an oblique direction, so as not to encroach too much upon the frenum, and gives it to an assistant, who holds it firmly, while the surgeon, with a bistoury, makes a complete section of the foreskin in front of the forceps. When the forceps is removed it will be found that more of the skin has been taken away than of the mucous membrane, which latter will seem to roll out and bulge forward, and, in a measure still cover the glans, to the disappointment of the young operator. To do away with this, the operation is completed by making a slit up along the dorsum and through it, for about one-third of an inch, or just enough so that the glans may be easily exposed up to the cervix. In boys after the third year, it is best to introduce sutures—the fine interrupted sutures. In young infants no sutures will be required.

A dressing of vaseline or boro-glyceride should be applied twice daily, and after the fourth or fifth day the sutures may be removed.

PRECAUTION.

In exceptional cases, where a narrowing of the prepuce is more marked than an elongation, and there is

* See Bumstead on "Venereal Diseases," 5th edition, p. 122.

* Dr. E. T. Williams, in the *Boston Medical and Surgical Journal*, Vol. 106, p. 6.

a shortening of the penis itself, circumcision should not be performed, but the prepuce on the dorsum should be slit up to the corona. This operation we will speak of presently. The operation of circumcision upon a child is always a troublesome one to make, and will be found exceedingly embarrassing to the young surgeon if he has not seen it often performed in a clinic.

DILATATION.

This operation will do for cases of phimosis that do not seem to produce much disturbance, or any specially unpleasant symptoms in the child, but there is simply a narrowing of the prepuce so that the glans cannot be well uncovered. It may also be made as a substitute for circumcision, when the parents object to the greater operation.

METHOD.

The prepuce is to be pulled forward, so that it is away from the glans, then a Nott's uterine dilator, an ordinary three-bladed tracheotomy forceps, Nelaton's phimosis dilating forceps,* or a small dressing forceps, may be introduced as far back as to the corona, and then the blades be gradually expanded, and at once withdrawn while still open. The dilator is now closed and introduced a second time, in a direction opposite to the first, when it is again opened and the prepuce dilated a second time in a direction at right angles to the first stretching. The dilator is now to be withdrawn while still open.

The opening in the prepuce has now been sufficiently stretched by the dilator, and the redundant mucous membrane is relaxed, so that the glans can be seen, and the prepuce should be immediately drawn back, so as to completely uncover the glans. Then, by the aid of a blunt silver probe, any persistent adhesions that exist between the prepuce and the glans should be broken up.

The operation is finished by drawing the foreskin completely back to the cervix. The dilator simply stretches the prepuce, and seldom produces much laceration or hemorrhage. After this operation is made, the prepuce must be drawn forward and so left, else it might become constricted, and we have the opposite condition, paraphimosis, which is far worse than phimosis. To obviate this, the mother or nurse should be instructed to draw it back and forward frequently, for a few days.

A simple dressing of vaseline or boro-glyceride is all that will be required, or, in exceptional cases, if any pain, swelling or cedema should follow, Goulard's

* Dr. W. S. Stewart, Professor of Obstetrics and Gynecology, in the Medical-Chirurgical College of Philadelphia, has devised a three-bladed "preputial dilator," appropriate for this operation. Dr. Stewart has a description of it in the *Philadelphia Medical and Surgical Reporter*, February 2, 1884, p. 137. Dr. Stewart recommends this operation as a substitute for circumcision, in many cases.

water diluted may be used; after two or three days it may be left to nature.

OPERATION OF INCISION.

This operation will be applicable where the opening of the foreskin is materially narrowed, with only slight preputial redundancy.

METHOD.

A pair of scissors with one point blunt* may be introduced between the glans and the mucous membrane of the foreskin, and a slit made up the dorsum, as high as the cervix, after which the skin and the mucous membrane should be stitched together by a few interrupted sutures. The operation may also be made by using a director as a guide, making a slit along the director by means of a sharp-pointed bistory. In some cases no sutures need be applied.

In surgical works several extra instruments are recommended as practical in the operation for phimosis, e.g., Velpeau's fenestrated forceps, for holding the prepuce before making the section of the same; and Levis' forceps, for preventing the contraction of the mucous membrane. These instruments I have often used, but do not find them especially necessary. The simple methods we have described above, for making the several operations, may be easily carried out without superfluous instrumental display. Upon a subject fraught with so much importance, I cannot close without quoting the opinions of Professors Barwell, of London, and Agnew, of Philadelphia. Regarding phimosis as a cause of hip-disease, I quote the following from a treatise on disease of the joints, by Richard Barwell, F. R. C. S., of London, second edition, 1881, page 289:

"A good many years ago I was struck with the fact that nearly all the boys admitted for hip-disease into Charing Cross Hospital had phimosis. In a short time this coincidence was found to be nearly, if not quite, constant. At last, in the middle of 1873, I began to note in a hundred male cases of hip-disease occurring in my private practice or admitted into hospital.

"The presence or absence of this condition, for the sake of better classification, is divided into classes:

CONDITION OF PREPUCE IN 100 CASES OF HIP-DISEASE IN BOYS UNDER TEN YEARS OF AGE.

1ST DEGREE.	2D DEGREE.	3D DEGREE.	ELONGATION.	NORMAL.
30	27	17	11	6

"First degree—the opening in the prepuce a mere pin-hole, so that on retraction no part of the glans, or only a minute portion of the urethral lips, could

* See Bumstead on "Venereal Diseases," 5th Ed., p. 137. "Taylor's Phimosis Scissors."

be seen. Second degree—in which all or a considerable part of, but nothing beyond, when retracted, uncovers some portion, but only a portion, of the glans. Fourth degree—elongated prepuce, projecting more than a quarter of an inch beyond the glans, but capable of entire retraction. Fifth degree—normal.

"The first line of this table is very significant, when it is considered that the cases are not picked or chosen, but represent every hip-disease in the male that came under my notice from the end of 1873 up to the middle of 1878, when my number was complete. It will be observed that of these cases eighty-three have phimosis; that only six have the normally formed prepuce, and that from complete, or the first degree of phimosis, to which class more than one-third of the cases belong, the number steadily declines to the normal. I would also point out that these are not fortuitous coincidences, because, for two years at least before commencing tabulation this association was remarked. Furthermore, I asked my friend, Mr. Morrat Baker, to inquire for me about the prevalence of hip-disease at the Evelina Hospital, which is largely used by Jews. He tells me that few children are there admitted for hip-disease, and that most of those so received belong, not to the Jewish, but to the Christian community.

"The important fact, however, is simply the coincidence of phimosis and hip-disease. A coincidence which I should never have dreamed of or imagined *had it not been forced upon my observation.*

"Upon the mode the one influences the other, I would rather not speculate further than to point out that phimosed children have facile, frequent, and often long-continued priapism; that this condition, unnatural in the infant, must produce, after a time, a certain irritability or irritation of the lumbar spinal cord; that from this part the various nerves of the pelvis and lower limbs are given off; and that just at this particular period large trophic changes are in progress above the hip-joint.

"Of course I have not overlooked the fact that hip-disease also occurs in female children, though I believe less frequently than in the male. I regret exceedingly that I did not simultaneously tabulate such cases, as I am now engaged in doing; but this I can say with certainty, that in a large proportion of girls afflicted with hip-disease will be found vulvitis, even vaginitis with or without discharge, and generally, I believe, produced in the first instance by thread-worms creeping from the rectum to the vagina. In a certain proportion will be found protruding nymphæ covered by a cuticular surface."

It will be seen by the above authority that my statements regarding the importance of phimosis as an exciting cause of morbus coxarius are confirmed by the

able authority of Barwell, and that the girls so affected are liable to have some accompanying lesions of the genital organs, such as vulvitis, or enlargements of the nymphæ. We also refer to Agnew's "Surgery," vol. 2, page 427. Dr. Agnew describes an aggravated case of eczema in a child, which had been persistent for more than one year, the eruption extending over the lower abdomen. The disease resisted the most careful treatment. Dr. Agnew, as an expert, was called in consultation, and found that the child had a congenital phimosis. He at once suggested that the phimosis was without doubt the exciting cause of the eczema, and thought that, after an operation to relieve the phimosis, the skin disease could be treated successfully. The adoption of Dr. Agnew's advice as to circumcision resulted in the immediate cure of the skin disease. Dr. Agnew further says that phimosis is often the exciting cause of epileptiform attacks, and mentions a case of convulsions that he saw in consultation, where a child had eight or ten convulsions, all the result of a long and narrow prepuce. He circumcised the child, and a cure was the result, as the convulsions subsided and did not recur. Dr. Agnew says, "reflex irritability arising from phimosis, involves all the voluntary muscles, as witnessed in general convulsions, but it occasionally selects groups of muscles, the spasmodic contraction of which may simulate club-foot, knee-joint disease, or even hip-joint disease." Dr. Agnew, in the same volume of his "Surgery," in describing pyelitis, mentions phimosis as a cause of it, and quotes from Mosler, who reported a case of this kind in a boy eighteen years old. The explanation made of phimosis as a cause was that it acted as an obstruction to the free passage of urine, and might, furthermore, produce stricture, hypertrophy of the prostate, chronic cystitis and renal calculus. It will be seen that the results of reflex irritation as the primary cause of diseases serious and lasting in their nature, are something worthy of the most thorough investigation and study; and it is with a feeling of satisfaction that we find our position fortified by such high authorities as Drs. Agnew, Barwell and Samuel Osborne, whom we have so liberally quoted from. Those of our brethren who may think that we have unduly magnified the complications arising from phimosis, will find themselves "distanced in the race," unless they keep themselves well posted in the literature of our profession.

As a final word, we would counsel practitioners, whenever they find young children with phimosis, to at once dilate the prepuce, so that the glans may be clear. In a great many cases this may relieve the child, although, if there be a redundancy of the prepuce, and the child's development seemingly interfered with, or any nervous or spasmodic affections be pres-

ent, then circumcision will be necessary, which can be performed at any time afterwards as may seem best.

The experience of the writer dates back seven years, and in that time he has performed the three operations described ninety-four times; and if a report was made of all the cases and the results, he flatters himself it would make an interesting clinical essay. The literature of phimosis that we have consulted, and to which we refer, is as follows:

Boston Medical and Surgical Journal, June, 1877, page 68; April 1, 1880, page 314; Vol. 106, pages 6 and 132.

Medical and Surgical Reporter, Philadelphia, Vol. 35, Nov. 11, 1876, page 395, Case of "Lithuria from Phimosis—Circumcision—Recovery." Also the same journal, Vol. 36, pages 23, 301 and 323; Vol. 38, pages 12, 193, 451; October 14, 1876, page 305; Vol. 37, page 175; Vol. 50, page 137.

Braithwaite's Retrospect, Part 72, page 88.

Cincinnati Lancet and Clinic, Vol. 8, page 403.

New York Medical Record, Jan. 7, 1882; Nov. 19 and 24, 1881; Feb. 18, 1882; Vol. 21, pages 9 and 65; Vol. 22, page 639; Vol. 19, page 220.

Medical Times, Philadelphia, Vol. 13, pages 503 and 669.

Half-Yearly Retrospect, Philadelphia, Vol. 21, page 9.

New York Medical Times, Vol. 12, page 83.

United States Medical Investigator, Chicago, Feb. 1, 1882, page 137.

St. Louis Medical and Surgical Journal, Vol. 45, page 324, "Indications for Dilatation."

St. Louis Clinical Review, Vol. 6, page 164.

Physicians' and Surgeons' Investigator, Buffalo, May, 1883, page 138.

Obstetric Gazette, Cincinnati, Vol. 1, page 523.

"Atlantis, or the Lost Continent," by Donnelly, page 151.

American Journal Medical Sciences, Philadelphia, Oct., 1870.

American Journal of Obstetrics, July, 1880, page, 693; June, 1884, page 664.

Medical News, Philadelphia, June 21, 1884, page 742.

"Phimosis," by E. B. Foote, M. D., New York, 1884.

London Lancet, July 1878, and Aug. 2, 1879.

New York Medical Journal, Aug., 1877.

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Medical Times and Gazette, London, Dec., 1835.

ON THE COMBINATION OF DRUGS.

BY HENRY G. HANCHETT, M. D., NEW YORK.

PART I.

IN listening to a course of lectures on hom opathic medicine, my attention was particularly attracted by the repetition of the remark from the chair of materia medica, in speaking of the various drugs which are chemical combinations of elements: "In this drug we see effects which are to be referred to this (or that) element which enters into its composition;" and by the frequency with which directions to alternate drugs, or hints to the effect that since such a symptom calls for calcaria, for example, and such another for phosphoric acid, we should prescribe calcaria phosphorica, are heard from the chairs of practice. This

has led me to investigate somewhat the subject of drug combinations, and as the result of my research I have to propose the following thesis:

The combination of two or more drugs into a single remedy which may be administered at one dose, is warranted by both hom opathic and old school experience and authority, and is advantageous in hom opathic practice.

This proposition may be defended, first, by an appeal to old-school experience; second, by an examination of such remedies as are in use by hom opathic practitioners, and are chemical combinations, and have been proved as such; third, by certain results obtained by hom opathic experimentation with combinations of drugs not proved in combination; fourth, by an appeal to the authority of the founder and certain leaders of the hom opathic school of medicine; fifth, by a consideration of the proper duty of a physician to his patients.

On the first head but little need be said. It is well known that the practice of the old school is to combine drugs, but in this connection it should not be forgotten that some of their combinations have stood the test of two or three centuries of use, and are giving satisfaction to-day in their practice. The Dover's powder is an example of a very efficient combination of drugs, and there can be no doubt that in many cases they have discovered how to put drugs together in a way that has done better service than any of the drugs entering into the prescription could have done by itself. In this connection a single sentence may be profitably quoted from the *American Digest* for 1832, Part 3, page 121, as follows: "Incontinence of urine in children. The combination of ergot, belladonna and iodide of iron is used at Bellevue Hospital, and proves more useful for incontinence of urine in children than either of the drugs alone, or in any other combination which has been tried.—*Medical Record*."

On the second head there is much to be said. I first compared the symptoms of chininum arsenicosum with those of arsenic and cinchona with surprising results. The reported symptoms of chininum ars. rest upon the authority of one prover only—Dr. Muhr—and fourteen symptoms are reported. These fourteen symptoms are nearly all to be found expressed in the same or similar language under one or other of the remedies combined in this substance. Argentum nitricum gave somewhat similar results. With this remedy I first examined about 127 symptoms which were marked as the most important among those contained in the provings. Of these I checked nine as being found both under argentum metallicum and nitric acid. Thirty-three were checked as found under argentum metallicum. Twenty-five were checked as being found under nitric acid. Thir-

teen were marked by a cross as being covered in effect by symptoms of argentum metallicum, although there expressed in different language. Twenty were similarly marked for their resemblance to nitric acid symptoms. Only 28 were found which seemed not to be represented or covered by symptoms of either argentum metallicum or nitric acid. This done I turned to the characteristic symptoms of metallic silver to see how many of those were expressed in the provings of the nitrate. I examined forty-five symptoms and found twenty-one of them retained; for eleven of them I found symptoms under argentum nitricum not exactly corresponding, but still having a close resemblance to the argentum metallicum symptoms; and for thirteen of the argentum metallicum symptoms I found no closely-corresponding symptoms under argentum nitricum. Then turning to the characteristic symptoms of nitric acid, I compared 158 symptoms with those of argentum nitricum with the following results: 69 covered, 18 approximately covered, and 71 not shown in argentum nitricum. This seemed to me pretty good evidence that the effects of nitric acid and silver are about as well retained after those elements are combined as are the ultimate atoms which enter into the composition of those substances, and also that argentum nitricum derives whatever virtue as a medicine it may possess almost entirely from the elements which enter into its composition. A similar examination of the combinations of iodine and mercury gave similar results. Of twenty-two characteristic symptoms of the biniodide of mercury, I found eleven in the provings of mercury, two in the provings of iodine, three closely resembling symptoms of mercury, and one similarly resembling a symptom of iodine. Of nineteen symptoms of the protoiodide of mercury one is found under both mercury and iodine, eight others are found under mercury, four more are found under iodine, two others are very like symptoms of mercury, two others are very like symptoms of iodine, and only one symptom is not to be found under either of the primitive drugs.

In order to show more satisfactorily the correspondences which I detect in comparing these symptoms, I append a comparison of antimonium tartaricum with its ingredients *in extenso*. My method of making these comparisons has been as follows: Taking the symptoms of tartar emetic as given in Cowperthwaite's *Materia Medica* as my basis, I have searched for these symptoms under antimonium crudum, causticum, and tartaric acid. In doing this I have examined Allen's *Encyclopædia*, Lippe and Cowperthwaite. By this plan I find what proportion of the symptoms of tartar emetic are derived from the elements which enter into its composition. Then taking the symptoms of antimonium crudum, causticum and tartaric acid successively, the first two as given by Cowperthwaite and

the last as given by Allen, I compare them with the symptoms of tartar emetic as found in Allen's *Encyclopædia*, thus learning how many of the characteristic effects of the three more simple drugs are retained in the effects of the compound. I am aware that neither of the drugs chosen is to be regarded as a simple element, but causticum is the nearest approach to potassium that has been proved, and by a comparison of antimonium crudum and sulphur it is possible to discover the share of the latter drug in the effects of the former. Here then is the result:

HEAD—Headache as from a band compressing the forehead, tart.; compressing sensation, caust.

Pressive pains in the forehead, stitching extending downwards into the left eye, tart.; pressure inwards, at times drawing in the left side of the forehead. Also: Sharp pressive stitches below the left eyebrow, ant.; also: Pressure in eyes as if sand were in them, caust.

Throbbing in the right side of the forehead, tart.; twitching headache in the right side of forehead and head; also: Severe throbbing in the forehead for three days, caust.

Painful drawing in the right temple, extending down to the zygoma and upper jaw, tart.; pressure inwards, at times drawing in the left side of the forehead; also: Momentary drawing of the left temporal bone, ant.

Trembling of the head, particularly when coughing, tart.; involuntary nodding with the head, just as if some one pressed it down; also: Jerkings and severe beating in the head every minute, in all positions during rest and motion, caust.

EYES—Obscuration of sight, flickering before the eyes, tart.; flickering of sparks before the eyes, caust.; also: Light obscured, caust.

Eyes bloodshot, tart.; red, inflamed eyes, ant.; eyes feel so tired that they would close, tart.; inclination to close the eyes, lids seem heavy, caust.

Inclination to press the eyes tightly together, tart.; inclination to close the eyes, caust.

NOSE—Sneezing, fluent coryza and chilliness with loss of taste and smell, tart.; fluent coryza with sneezing, ant.; also: Frequent sneezing, caust.; also: Chilliness and loss of smell, caust.

Stupefying tension across the root of the nose as from a band, tart.; not found.

FACE—Pale, sunken face, tart.; pale lips, caust.

Convulsive twitching in almost every muscle of the face, tart.; slight twitches in the muscles of the left side of face; also: Twitches of the muscles at the corners of the mouth, ant.

Lips dry and scurfy or cracked, tart.; cracks in the corners of the mouth; also: The lips are dry, ant.; also: Constant dryness of the lips, tart. ac.

MOUTH—Tongue covered with a thick white pasty coat, red in streaks, very red, dry in the middle, tart.; tongue coated white, also feeling of soreness and redness at a small place on the right border of the tongue, ant.; also: Brown and dry tongue; also: Pasty taste in the mouth, tart. ac.

Difficult, even painful to move the tongue, tart. Not found.

THROAT—Sharp pain in the throat, tart. Not found in these words, although sore throat, ant.; also: Burning pain in the throat, tart. ac.; also: Rawness and scraping in the throat, caust.; also: Sore throat as from a lump with sticking pain in it, caust., seem to cover the symptom nearly.

Swallowing painful, impossible, tart.; impeded deglutition, ant.

STOMACH—Desire for acids, tart.; longing for acids, ant.

Entire absence of thirst, tart. This symptom I do not find under the other drugs, but under tart. Allen gives "great thirst," and under ant. he gives "violent thirst."

Empty eructations at night, as from foul eggs, tart.; eructations, empty, tasteless, caust.; also: Loud eructations, ant.; also: Eructations, tart. ac.

Qualmishness in stomach after dinner, tart.; nausea causing anxiety, with slight pressure in pit of stomach followed by headache in forehead, incessant, with vomiting the whole night, tart.; also: Vomiting with great effort, intense and long-lasting till he becomes faint, followed by languor, drowsiness and loathing, with headache and trembling in hands, tart. These symptoms seem to correspond nearly with the following: Nausea after drinking a glass of wine; also: Fullness and inflation after dinner; also: Violent vomiting and diarrhoea with excessive anguish; also: Pressure at the stomach; also: Terrible vomiting which nothing can stop; also: Fearful vomiting with convulsions; also: Heaviness of the forehead with nausea; also: Loathing, nausea, and desire to vomit, ant.; also: Repeated and almost continual vomiting, tart. ac.; also: Drowsiness and trembling, caust.

Beating and throbbing, particularly in pit of stomach or abdomen, tart.; uneasiness and jerking in the abdomen at night, which did not allow her to sleep before twelve. Also: Quivering or muscular twitchings in the lower portion of the abdomen when sitting bent, caust.

ABDOMEN—Abdomen feels as if stuffed full of stones, although he has eaten nothing and it does not feel hard, tart.; painful sense of fullness of stomach, which is sore to pressure, ant.; also: Pain in the stomach, as after too much eating, with distended but not hard abdomen, ant.

Sharp cutting colic before stool, tart.; violent cutting in the abdomen; also: Cutting in the abdomen with feeling of nausea there, ant.

Meteorism of the abdomen, tart.; distended, big abdomen; also: Abdomen very much distended, ant.

STOOL AND ANUS—Watery, slimy, bloody diarrhoea, tart.; stool watery with little hard lumps, ant.; also: Discharge of mucus from the rectum and expulsion of black blood by the rectum, ant.

Diarrhoea and vomiting, tart.; violent vomiting and diarrhoea, ant.

Very offensive diarrhoeic stools, tart. Nothing said about odor of stools under other remedies, but I find expulsion of much stinking flatulence under ant.

URINARY ORGANS—Burning in the urethra during and after urination, tart.; burning in the urethra, caust., also ant.

Urging to urinate, scanty discharge, last drops bloody, accompanied by violent pains in the bladder, tart.; constant urging to urinate with extreme dysuria; also: Long-continuing, frequent micturition, little urine being expelled in great haste, also frequent micturition with discharge of a small quantity of watery urine, ant.

Urine dark, brownish-red, turbid with strong odor, tart.; urine dark brown, turbid and cloudy on standing, caust.

RESPIRATORY ORGANS—Respiration short, rapid, heavy and anxious; difficult, must be supported in the sitting posture in bed, tart.; respiration accelerated, then labored and slow, tart. ac.; also: Dyspnoea; also: Difficulty of breathing, ant.

Suffocated and oppressed, cannot get air, has to sit up in bed, tart.; suffocating asthma; also: Oppression of the chest, ant.

Shortness of breath from suppressed expectoration, tart.; shortness of breath precedes the cough, caust.

Oppression of breath relieved by expectoration, tart.; oppression on the chest, ant.

Much rattling of mucus in the chest, tart.; rattling in the chest when coughing, caust.

Chest seems full of phlegm without ability to expectorate; also: Anxious with oppression of the chest and rising of warmth to the heart; constriction of the chest, tart.; cough with discharge of thin phlegm deep out of the chest; also: Deep sighing breathing, as from fullness of the chest; also: Oppression of the chest, ant.

Coughing and gaping consecutively, particularly children, with crying or dozing and twitching of the face, tart.; frequently dry cough; also: Frequent yawning; also: Slight twitching of the muscles of the left side of the face; also: Twitching of the muscles at the corners of the mouth, ant.

HEART AND PULSE—Palpitation of the heart, tart.; violent palpitation of the heart, ant.

Pulse rapid, weak, trembling, tart.; very weak action of the heart and feeble pulse, tart. ac.; also: Pulse sometimes a few quick, then three or four slow beats, ant.

Oppression at the heart, tart.; oppression on the chest, ant.

Pulse full and slow, or contracted and hardly perceptible, tart.; pulse became perceptibly small and slow, caust.

LIMBS—Insensibility and coldness of the limbs, tart. Not found.

Weakness in all the limbs, tart.; paralytic weakness of the limbs, trembling, caust.

Trembling of the hands, tart.; also under caust.

Hands cold and moist, tips of fingers icy cold, as if dead, tart.; constantly icy cold feet, ant.; also: Much chilliness; also: General cold feeling, tart. ac.

Tension in the ham strings, tart.; tension and stiffness in the hollow of knee upon walking, caust.

Feet go to sleep immediately after sitting down, tart.; sensitive stinging in the sole of the right foot going off by rubbing; also: Sharp fine prickings in soles of feet, ant.

GENERALITIES—Trembling, whole body, internal, head and hands, tart.; convulsions and trembling of the limbs; also: Lassitude, tremulous fatigue and heaviness in all the limbs after dinner, with trembling of the hands when writing, ant.

Child wants to be carried, cries when touched, will not let you feel the pulse, tart.; child is fretful and peevish, does not wish to be touched or looked at; also: Aggravation from touch, ant.

Excessive restlessness, tart.; at night cannot get a quiet position or lie still a moment, caust.

Great weakness and lassitude; also: Great prostration and sluggishness of the body, tart.; excessive weakness; also: In the evening he feels very tired and can scarcely drag himself along, tart. ac.

Faintness, tart.; faint-like sinking of strength, caust.

SKIN—Thick eruption like pox, often pustular, as large as a pea, tart.; eruptions like boils and blisters; also: Pimples that itch when getting warm in bed and prevent sleep; also: Pustules with yellow or brown scurf here and there, ant.

Vesicular eruption over the whole body, tart.; vesicles in the face and upon the nose like varioloid, with stinging pain on pressure; also: Vesicular pimples like varioloid, with stinging pain at several places on the skin, ant.

Pustular eruption, leaves bluish-red marks on face; also: Similar eruptions on genitals, thighs, etc., painful, tart.; red, burning, suppurating eruption upon the face; also: Large, hard pustules on the left half of the nates, with itching and tensive pains; also: Red pimples on the knee, like vesicles,

resembling varioloid, with stinging pain when touched, ant.

SLEEP—Great sleepiness, irresistible inclination to sleep, tart.; great sleepiness during the day; also: Sleepiness in the forenoon; also: At seven o'clock in the evening she feels overwhelmed with sleep; also: Sleeps soundly at night, ant.

Yawning, tart.; frequent yawning, ant.; also tart. ac.; yawning and stretching, caust.

Shocks and jerks during sleep, tart.; many motions with arms and legs during sleep, caust.

FEVER—Trembling and chilliness over the whole body, tart.; chilliness even in a warm room; also: Shivering over the whole body without thirst, ant.

Unusual heat of the body, tart.; he feels quite hot in consequence of the slightest exercise, especially in the heat of the sun. He then complains of excessive heat in the throat, also at night when in bed he feels quite hot and is drenched with sweat, ant.

Cold, clammy sweat over the whole body; also: Profuse sweat all over, frequently cold and clammy, tart.; general cold feeling, tart. ac.; also: Mild sweat over the whole body, also drenched with sweat; also: General sweat without smell, which makes the tips of the fingers soft and wrinkled, ant. I do not find "clamminess" under the other drugs.

Now turning to the symptoms of antimonium crudum, as given by Cowperthwaite, a comparison with tartar emetic gives the following results:

MIND—Child delirious, drowsy, with nausea, hot and red face, pulse irregular, feverish heat, cries when washed in cold water, better washed in warm water, ant.; furious delirium; also: Inclination to sleep; also: Great sleepiness; also: Nausea, also: Red face; also: Burning heat of face; also: Pulsation of heart small and irregular; also: Heart's action accelerated, irregular; also: Heat; also: Flushes of heat rising to the head; also: Dry heat driving him out of bed; also: Fever, tart. The remaining symptoms must be referred to sulphur, where they are partially covered by: Child dislikes to be washed and bathed; also: Aggravation from washing and bathing.

Child is fretful and peevish, does not wish to be touched or looked at, ant.; peevish and quarrelsome; also: The child will not allow itself touched without whining and crying; also: If one looked at him he began to howl, tart.

Great sadness and woeful mood, ant.; very morose, dejected and sad, tart.

Sentimental mood in moonlight, particularly ecstatic love, ant. This symptom is concealed by combination.

Sulky, does not wish to speak with any one, ant.; bad humor, everything goes wrong, noise is intolerable; also: Peevish and quarrelsome, tart.

HEAD—Heaviness of the forehead, vertigo, nausea, nose-bleed, ant.; head confused with heaviness and pressure in the forehead; also: Vertigo; also: Nausea; also: Nose-bleed, tart.

Slight dull headache and vertigo, increased by ascending stairs, ant.; head heavy, confused, with great discomfort on walking; also: Vertigo on walking; also: Dull pain in the forehead, tart.

Violent headache after bathing in the river, with weakness of the limbs and aversion to food, ant.; violent headache; also: Weakness in all limbs; also: Weakness of limbs, especially legs; also: Cannot eat on account of nausea and aversion; also: Appetite completely lost, tart. The aggravation from bathing must be referred to sulphur as above.

EYES—Eyes red, inflamed with itching and nightly agglutination, morning photophobia, ant.; blood-shot eyes; also: Burning in the eyes, tart. These symptoms seem to come

chiefly from sulphur, under which are found: Inflammation of eyes or lids with swelling, redness of conjunctiva and much itching, burning and sweating, also agglutination of the lids at night, also great sensitiveness of the eyes to the light of the sun.

Redness and inflammation of eyelids, ant.; acute conjunctivitis with much lachrymation, tart.

Soreness of the outer canthi, ant. This symptom is not well covered, but under sulphur is near outer canthus of left eye an intensely red, excessively itching and burning spot under the skin; also: Ulceration of the margins of the lids.

NOSE—Sore, cracked and crusty nostrils, ant.; the corners of the nostrils are ulcerated and painful, tart.

Nose painful when breathing, as if from inspiring cold air or inhaling acrid vapors, ant. Concealed in combination.

FACE—Cracks in the corners of the mouth, painful like sores, ant.; cracked lips; also: Dry scurfy lips, tart.

Suppurating and long-lasting eruptions on cheeks, ant.; a thick eruption like pox, often pustular, as large as a pea, filled with pus; also: Most of the suppurating places become confluent the eighth day, tart.

MOUTH—Toothache in hollow teeth, worse at night, worse after eating and from cold water. Touching the teeth with the tongue causes pain as if the nerves were torn, ant.; violent toothache; also: Tearing in three or four teeth; also: Pain in the root of a tooth; also: Aggravation after eating or drinking and at night; also: From touching parts gently by hand, tart.; the aggravation from cold water is doubtless sulphur.

Stitches in tooth when inspiring air, ant. Sulphur has toothache to slightest draught of air.

Dryness of the mouth, ant.; mouth dry, tart.

Much salty saliva in mouth, ant.; increase of saliva, salty taste, tart.

Rawness of the palate with expectoration of much mucus when clearing the throat, ant.; roughness in throat; also: throat raw; also: Increased mucus secretion in throat, tart.

Tongue coated thick white, ant.; tongue thickly white coated; also: Tongue covered with a thick, white, pasty coat, tart.

STOMACH—Violent thirst with dryness of the lips, ant.; great thirst; also: Urgent thirst; also: Thirst for beer or sour milk with dryness of the throat; also: Dry, scurfy lips, tart.

Belching, with taste of what has been eaten; also: Vomiting of mucus and bile, ant.; eructations with taste of the breakfast; also: Painful vomiting of much mucus and bile mixed with some blood, tart.

Aversion to food, longing for acids, ant.; cannot eat on account of nausea and aversion; also: Desire for acids; also: Desire for strong liquors and acids, tart.

Pain at stomach after too much eating, with distended but not hard abdomen, ant.; pains in the stomach; also: Acute pain in the stomach; also: After eating sensation as if overloaded in stomach; also: Pains in abdomen; abdomen seems stuffed full of stones, although he has eaten nothing, and it does not feel hard, tart.

Cramp-like pains at stomach, ant.; cramp in stomach; also: A kind of cramp in the upper and lower abdomen, tart.

Loathing, nausea and a desire to vomit, ant.; nausea and a great aversion to food; also: An especially disgusting sensation in the stomach. She believes it would do her good to eructate, tart.

Stomach weak, easily disturbed digestion, ant.; weakness in the stomach; also: Irritation in stomach and nausea, tart.

Burning in pit of stomach, like heartburn, with good appetite, ant.; burning heat in stomach; also: Burning and pressure in stomach; also: Unusually good appetite, tart.

Painful sense of fullness of stomach which is sore to pressure, ant.; fullness in the stomach; also: On touching the parts gently with the hand the pain increases in the region of the stomach; also: Abdomen sensitive to touch, tart.

ABDOMEN—Very much distended abdomen, ant.; inflated abdomen; also: Upper abdomen distended and painful; also: Abdominal meteorism, tart.

STOOL AND ANUS—Stool watery, with little hard lumps, or containing undigested food, ant.; diarrhœa is very watery; also: Liquid, greenish stool, tart. I find nothing to compare with "little hard lumps" except "dead roundworms."

Diarrhœa worse from vinegar and other acids, sour wine, over-heating, after cold bathing, at night and early morning, ant. This symptom can hardly be found in its own form, but under tart. we have aggravation from drinking and from warmth, and under sulphur we have aggravation from bathing after midnight.

Alternate diarrhœa and constipation of old people, ant.; stools vary, sometimes hard, sometimes soft; also: Diarrhœa; also: Constipation, tart.

Difficult hard stool; fœces too large, ant.; uncommonly hard stool, difficult to pass, tart.

Mucus piles, prickling and burning; continuous mucus discharge from the anus, ant.; hemorrhoids; also: Sticking pain in the rectum; also: Burning in the anus after stool; also: Abundant diarrhœa; also: Involuntary evacuations of much mucus and dead roundworms; also: Fœces mixed with mucus and bile, tart.

Pain in rectum during stool; feeling of soreness as if an ulcer had been torn open; also: Itching of the anus, ant. These symptoms must be referred to sulphur, under which they are covered, but without allusion to "ulcer."

RESPIRATORY ORGANS—Loss of voice from getting overheated, better after rest, ant.; speechless; also: Aggravation from warmth; also: Aggravation from motion, tart.

Feebleness of voice, ant.; voice small, changed, tart.

Violent spasms in the larynx and pharynx, as if the throat were filled with a plug, which becomes alternately thicker and thinner, accompanied by a feeling of soreness, ant.; asthmatic ever since the proving; also: Respiration hindered on account of swelling in the pharynx and accumulation of tough mucus there, with fever and delirium; also: Throat raw; also: Dyspnoea; also: Roughness in the throat with sensation as if a small leaf obstructed the windpipe on hawking, tart.

UPPER LIMBS—Arthritic pains in the fingers, ant.; tearing and drawing in the extremities; also: Fingers firmly contracted down upon the shoulders with every muscle in an extraordinary state of rigidity; also: Twitching and tearing below the right third finger, tart.

Finger nails do not grow as fast as formerly, skin beneath the nails painfully sensitive; also: Crushed finger nails grow in splits and like warts with horny spots, ant. One could hardly expect to find such symptoms elsewhere.

LOWER LIMBS—Rheumatic pains in legs, ant.; rheumatic pain in and over the left hip; also: Rheumatic drawing in the upper part of the right thigh; also: Rheumatic pain on the left side of the left calf; also: Rheumatic and bruised sensation in the limbs on rising and shortly before it, tart.

Numbness of legs during rest and while sitting, ant.; numbness and coldness in the legs, tart.

Large horny places on the soles, close to the toes, ant. Not found elsewhere.

Great sensitiveness of soles when walking, ant. Not found, but seems allied to sulphur.

SLEEP—Great sleepiness during the day, mostly in fore-

noons, ant.; great sleepiness; also: Forenoons great desire to sleep, tart.

SKIN—Eruptions like boils and blisters, ant.; vesicular eruption over the body; also: Painful pustular eruption; also: eruption of pimples and vesicles which in two days are filled with pus, are like the pustules of small-pox, are very painful, tart.

Horny excrescences, smooth warts, ant. Not found.

Pimples and vesicles as from stings of insects, ant.; small, red elevated spots like flea bites appear on the hands, tart.

Measly-like eruption, ant.; seems covered by: Eruption of bright red, small, conical, distinct, hard pimples, with inflamed base, tart.

EVOLUTION OF MECHANICO-PHYSIOLOGICAL THERAPEUTICS.

BY GEO. H. TAYLOR, M.D., NEW YORK.

It is obvious that the mechanical principles embodied in normal physiology are ample to maintain in health the base of the abdominal wall and the interior parts in juxtaposition therewith. Morbid affections of this region are inseparably connected with defect of mechanico-physiological activities. The health of these parts rises and falls in degree, in the ratio of corresponding fluctuations in the organic rhythm, and its restoration may confidently be sought through the restoration of this rhythm, even in the absence of other remedies. The means for cultivating this rhythm, therefore, constitutes the true and practical therapeutics of the region thus suffering from its defects; a remedy of broad range of applicability and searching power—constituting a branch of therapeutics hitherto almost neglected.

The appropriateness of mechanico-therapeutics for affections of the different contents of the lower portion of the trunk and pelvis, is made evident by their topographical association; by their consequent exposure to the same mechanical influences, whether these tend to health or the contrary; by the fundamental nature of mechanico-physiological action which has been shown to dominate all these associated parts as a mechanical unit, without reference to their anatomical or their physiological peculiarities; and by the perfect agreement, indeed the unity, of the remedy with the physiological needs.

The mechanico-physiological principles, whose therapeutic availability have in the preceding pages been set forth, present certain advantages which might be presumed to be exceedingly favorable to their universal adoption. A medical education is not essential to their being understood. They may be practically verified by any one in his own person and behalf. Any incorrectness of statement can be easily and quickly shown, so that no currency should be given to errors. All, whether scientific inquirers, cavilers, believers or unbelievers in the principles set forth, can thus satisfy themselves of their verity

and utility by the same tests afforded in actual therapeutic applications.

The above considerations are, in reality, disadvantages. As to the invalid, they remove him from his natural position of credulity and childlike dependence. His faith in powers outside himself and not under his control, rises in proportion to his disobedience to physical laws. Invalidism is, in a sense, a reversion to a more elementary condition, credulity supplying the place of knowledge. The invalid substitutes the subordinate and incidental for ultimate causes. In the matter of remedies he is often best satisfied with the mysterious and unintelligible.

The medical prescriber labors under even greater disadvantages as respects the adoption of fundamental principles. A student of medicine is less an inquirer and searcher for truth than for established precedent—the conclusions sanctioned by time and incorporated into the lore of the profession. For a physician to pursue inquiries deemed irrelevant by his confrères, is to be denied the advantages of which he is nominally in pursuit—the fellowship and guidance of an honorable body whose favorable estimate is essential to his professional life. Current medical literature, a record of survivals from complex and often dangerous medication and operations, offers more mental food than he can well digest. It is only through the force of peculiar circumstances, which may not be of his own seeking, that the physician may be led into anomalous and special paths of inquiry.

The physician, besides, impliedly engages to please his patient, satisfying his mental, emotional and moral idiosyncrasies. He almost instinctively adjusts his processes and purposes to that end. These are some of the reasons for the tardy popularity of fundamental principles in therapeutics.

The facts and principles which have been set forth relating to the etiology and therapeutics of affections incident to the basal region of the trunk are stated confidently, because as thoroughly proved as anything can be. They are the results of actual extended experimentation, not in any single aspect of the subjects to which they relate, but all, in almost endless variation. The reader may be interested to learn that it was but a slight event that suggested the direction and pursuit of this long series of experimental and searching labors, which led onward to the conclusions now made.

The event referred to is narrated in the author's book, "Diseases of Women," in sufficient detail. A man of some distinction, who had suffered for many years from prolapse of the rectum, applied for relief. The sphincter appeared to have little power to retain the intestine when reposit; and the irritation extended to the remainder of the digestive tube, and superinduced constant straining.

Such a case was particularly favorable for the demonstration of the capability of the mechanism of the organism, to draw upward and inward the extruded portion of the bowel, and to maintain the advantages thus secured. The recalcitrant segment of bowel had, for many years, been frequently and forcibly *pushed* inward and upward, in opposition to the sphincter, and against the persistent opposition of the vermicular motions of the abdominal portions of the intestines, but without the least curative advantage. This mode of palliation was almost constantly required.

The process substituted for pushing the bowel upward was that of *pulling* upward the same part, by means of the mechanism of the organism; the force being supplied from the interior, instead of at the exterior or extruded part of the rectum.

The first trial was, in this case, perfectly successful—nothing further could be desired. The proof of the retreat of the bowel was ocular and void of any questionable or deceptive element; the processes agreeable and not in the least painful; the result perfect and permanent, and in no sense transient or palliative. Auto-reposit by the new method was found to be perfectly practicable and easy, and the effect could be uninterruptedly maintained, without truss, pad, or exterior mechanical or other application. The remedial indications were thus fully provided for; nothing more was needed but such instructions in a few self-applied processes as would become a safeguard against future possibilities.

The important positions in pathology and therapeutics that had now become demonstrated, were these:

Downward displacement of the contents of the inferior portion of the cavity of the trunk is not a local disease; any consequence of dislocation of anatomical relation cannot, therefore, be an independent affection. An affection thus caused and dependent must fluctuate in degree in proportion to fluctuations of its cause. The manifestation may be produced or removed by supplying or withdrawing its cause. The causative factor is therefore the essential one to be considered in a therapeutic light.

Another principle of equal importance was simultaneously demonstrated. The organism is endowed with functions purely mechanical, always in reserve for instant use, adapted to control the mechanical position of the organs mechanically associated in the pelvic region. It further became apparent that whatever function of these same parts is dependent on, or affected by mechanical position, is controllable by the same cause. The illustrative case now referred to was afflicted with unmanageable diarrhoea, which instantly ceased with the restored position. A more common coincident is constipation, which is of course

incurable without restoration of the mechanical difficulty, and so of all other subordinate symptoms.

In due time each of these and a multitude of other inferences became verified by actual cases restored; and it was found that, so far from being a possible exceptional case, it was difficult or impossible to find exception to the principle.

Weakly children, liable to a similar symptom, were found particularly amenable to the processes adopted, even in nurses' arms. Strangulation and proctitis do not afford exceptional cases; in these cases ordinary sedatives are a convenience, if the limit of their aid be understood, and that the real difficulty, is met only by another form of remedy. Hernia was proved practically to belong to the same order of affections, and to be easily amenable to similar internal mechanical methods of cure.

The convictions established by positive demonstration, corroborated by the physical facts of physiology and by the hard facts of therapeutic success, cannot be weakened by opposing theoretic speculations. The power and the sufficiency of mechanico-therapeutics are too readily shown to permit of dispute. The inference became irresistible that *all* the organs, topographically related, in male and female, must be obedient to the control of the same mechanical cause.

The transition from the rectum and affections of the hernial region to the contents of the female pelvis was inevitable, in both etiology and therapeutics. The very close mechanical relationship of the parts rendered that of therapeutics a justifiable inference. But since the deviation from health of the contents of the pelvis of the female, appertains both to the anatomical parts and to special functions intimately interwoven with the whole existence; and since the morbid conditions acquired through the same source become differentiated to an extraordinary degree by morbid development, to which the pelvic parts belonging to the male are not liable, a critical survey of the whole subject appears to be necessary to render the sovereignty of mechanico-therapeutics intelligible.

Anatomically, the contents of the female pelvis form the inferior boundary of the abdomen, upon which the contents of the latter, when otherwise unsupported, necessarily rest. It follows that both pelvic contents and hernial tissues bear the same mechanical relations to the parts above, and therefore submit to the same mechanical laws, whether favorable or otherwise.

The different effects of the morbid cause, heretofore sufficiently explained, become due to the following differences incident to sex. The narrower superior opening of the male pelvis would cause a proportionately larger area of the base of the abdominal wall to become exposed to the unsustained and

unmitigated compression of the overlying abdominal contents, and a proportionately increased exposure of the wall to consequences of compression or hernia.

So, also, the broader opening of the female pelvis affords a sort of guide, directing pelvis-ward the unsupported abdominal contents. A much larger surface of the pelvic boundary is thus exposed to these mechanical effects in women than in men. In women, the mechanical effects are divided among a multitude of distinct parts, in accordance with the peculiarities of their mechanical exposure to the downward operating force.

While in men, the parts liable to suffer from unantagonized gravitation and other causes co-operating with it, are limited to the rectum and the hernial border of the abdomen, in women, not only are the organs increased in number, in size, in exposure, but also in relative functional importance, and pathologically, by the vast extent to which differentiation is possible, and the ultimate consequences which flow from this fact.

It is these latter circumstances which, by disguising the true etiology, has been the puzzle and the stumbling-block of the gynecologist unpossessed of the requisite therapeutic evidences.

Besides the rectum, whose function is comparatively insignificant, exercising but slight influence on the organic whole, and whose pathological differentiations are perfectly simple and intelligible, the female pelvis contains the generative intestine. This consists of the vagina, the uterus, the Fallopian tubes, the ovaries, the ligaments, a very large proportion of connective tissue, and an immense reticulation of blood-vessels, normally subject to extremes of dilatation and contraction. This latter fact carries with it in nature adequate physiological provisions for the *control* of the contents of these vessels. This control involves the disposition at all times, and also at periodical intervals, of the contents of a reservoir of blood adapted to nutritive support, or to some morbid alternative, according to the more or less perfect operation of the provision referred to.

There therefore appear abundant reasons in the anatomy of the female, and still more abundant in the physiology of the organs occupying the pelvis, why the same mechanical influence, in its infinite gradations, must produce a variety of effects in women, to which men are not exposed; also why these effects are so modified by concurrent circumstances and intermediate forces as to completely disguise the origin to one who confines his observations to the local products and to the sensorial phenomena and nervous complications connected therewith. Even adepts are quite led astray by the sensorial phenomena, without reference to the nature of the physical defects in which these originate. The etiological facts and

principles being neglected, it is no wonder that remedial prescriptions degenerate into weak apologies for local support that is never in reality supplied; and to a still more feeble pandering to the sensibilities, and to the irritable emotional activities which are incidental to this class of affections, instead of addressing the sources of these, and in a robust manner securing positive and radically curative effects.

It is readily seen that the practical success of mechanico-therapeutics of affections of the contents of the pelvis, including the related hernial border, in all their varieties of form, is based on the practical unity of cause; and that this cause consists of the mechanical defects of dominating functions and parts.

The more thoroughly to show the practical unity of the effects of defective sustentation, however differing these may superficially appear as relates to location, form, extent and degree of development, the more usual varieties will now be considered by way of comparison:

1. The inferior boundary of the abdomen and the superior boundary of the pelvis are in an imaginary plane, of which the hernial border of the abdomen is an extension outward. It is therefore clear that the irregular convolutions of the abdominal contents are in direct contact with the superior surface of the pelvic organs, exactly as they also are in contact with the inner face of the hernial tissues. The projecting loops and segments of both are applied to and engage in the respective anfractuositities of either, as a wedge enters a crevice. Any weakness and interior depression of the inner face of the hernial tissues, invite precisely the same wedge-like relation. These mechanical relations of parts being the same, it follows that the mechanical consequences must also be the same. Cleavage of separable parts, whether of abdominal walls or of the organs of the pelvis, is inevitable, and in proportion to the unrestrained downward force. Local mechanical opposition, whether exterior to the abdominal wall, or below the pelvic contents, produces not the least effect on the downward force. This force has two main sources: one is gravitation acting independent of physiological restraints; the other is perverted action of muscles of the trunk from defective use and training.

It therefore appears that the condition of the pelvic contents is intimately related to that of the contents of the base of the abdomen, both being dependent on the degrees of perfection attained by dominating forces having physiological sources. The partial or complete suspension of these causes allows extrusion of the rectum through the sphincter or loop of intestine through a weak point of the exterior wall. When the subject is female, the mechanical cause is more forcibly directed to the pelvis, urging out of place and out of shape its contents, the intru-

sion being a conceded fact as relates to the digestive organs, but an inconspicuous one as relates to the displaced generative intestine, which thenceforward becomes the object of untiring gynecological endeavor.

The form assumed by the effect is, of course, the product of subordinate causes, and therapeutically demands but subordinate attention, and even this is unessential to the ultimate result of medical treatment.

2. The identity of source of the different effects known as protrusion, when applied to the rectum, and as displacements when the female generative organs become their principal seat, and which are the necessary concomitants of intrusion, is further shown by the remedies ordinarily employed. The truss pad for hernia, the T bandage for rectal prolapse, correspond to that multiform device generally known as the pessary. These devices all have the same mechanical purpose of obstructing the outward passage of viscera where this appears to be threatened. Each of these are applied exteriorly to the obtrusive manifestation; each supplies obstacles, not to the cause, but to its effects; each is employed in utter disregard of the cause.

The most ardent advocates of either of these remedial methods do not pretend that these instruments, in any of their varieties of shape and modes of use, or by the most dexterous management, are capable of producing the least effect in the way of supplying physiological sustentation. They cannot diminish in the least degree the superincumbent weight, nor the effect of this weight at some point where it is due, and where the weight becomes mischievous. These appliances all equally discourage the rhythmic motions which supply sustentation, and afford no auxiliary to, or substitute for, the physiological action by which alone the health and position of these parts are determined.

The identity of source of these varied affections is therefore shown by the identity of the misconceptions which prevail in reference thereto, and by the similarity of the pathological consequences resulting from misguided attempts at cure.

3. The diversities of form incidental to both hernial, rectal, and pelvic affections, are further evidence of community of origin. A protrusion may occur at a variety of points along the lower border of the abdomen. The actual location of the manifestation, whatever the variety of form, evidently depends on subordinate factors, and is not, in fact, due to any peculiarity of the downward urging force, but to the obstacles which fail to oppose, but serve to guide the effect, whether this be protrusion or intrusion. These circumstances, so far from being causes, are therefore only subordinate conditions, and could have no

influence in the absence of the primary fact heretofore explained.

This relation of primary and secondary or guiding factors is further shown in the facts already developed in regard to the therapeutics of each of these classes of affections. Supports have no effect beyond the point also reached by subordinate conditions; they turn or check the descending viscera only at certain progressed stages of downward career, and not at the incipient and curative stage; while the sustentation afforded by restored power quite supersedes these supposed remedial needs.

4. The principles now developed in regard to true support of the abdominal and pelvic viscera, and of the nature of the mechanism which never fails to be at fault, whenever the hernial tissues and the pelvic contents afford evidence, physical or rational, of defective support, are further confirmed by certain other mechanico-physiological facts pertaining to the pelvic region.

If it be true, as therapeutists so frequently assume, that visceral gravitation is opposed, naturally, and properly, and adequately, by the parts immediately beneath the gravitating mass, the fact should be patent at the perineal outlets of the body. On this assumption, the whole overlying mass constantly tends toward these outlets, restrained only by the sphincters; an assumption contradicted by the universal experience of the healthy. On this assumption, also, muscular action, especially such as contracts the circumference of the trunk, as lifting, bending, and even evacuating the bladder and bowels, would be attended by the peril at least, of dislocating the viscera; this is opposed by the facts of experience. On the same assumption, also, the perineal body should have great natural resisting power on account of its exposure to the assault of the conjoined forces acting downward. On the contrary, this organ is almost devoid of muscle or of any resisting power whatever, but, by its loose construction of connective tissue, is better adapted to yielding than to resisting. It is entirely powerless to prevent the class of effects implied by the assumption named.

The above considerations prove, as far as anything can be proved by the argument from design, that nature's intention is to supply sustentation and support from above, and not from below, and that medical and surgical interference pointing to the contrary is misconceived in theory and futile in practice.

5. The ultimate morbid possibilities reached by extrusion under the names of hernia and of intrusion under a variety of names, still further prove the identity of cause. The possible result of hernial and of rectal protrusion is strangulation. The part dies in consequence of compression, which prevents the blood from circulating in the constricted part, de-

priving it of nutrition, that is, of both supply and waste of material.

Local disease of the pelvic organs presents similar results, modified as to extent. The comparatively large size of the pelvis and the extent of its connected contents, together with the vast amount of reticulation of its nutritive vessels, preclude the possibility of their complete obstruction and consequent loss of vitality. Instead of this, the consequences of embarrassed circulation arise in the form of diminished vital power and accumulation of substance over which there is diminished control, both vital and vitomechanical. The capillaries become distended with sluggish blood currents. This is hyperemia, which, with its immediate results, is gynecologically known by a multitude of other names, according to the location of the point of greatest excess of the effect described. The analogy between the effects of partial and complete obstruction of blood currents, whether in a hernia, a prolapsed rectum, the compressed vessels of the female pelvis, or a finger of the right hand, is too obvious to require comment. The fact of obstruction, in some degree produced by compression, and of its consequences, varying with the nature and location of the organ, remains. The therapeutic suggestion is too plain to require statement.

6. The common origin of the group of affections under consideration is further shown in the nature of the ultimate causes. This is such as to include all varieties of forms, however diverse their final development.

The cause of dislocation and depression, the evidences of which become manifest in various ways, has been shown to consist in diminution, not unfrequently in entire suspension, of the extension to the pelvis and its vicinity of the never-ceasing rhythm necessary to the health of these parts, and necessary also to their proper topographical relations. This motion sustains mechanically, and if need be, draws upward with irresistible power, the contents of the pelvis and the adjacent abdominal contents.

Restricted extent of rhythm is the proximate cause of loss of sustentation. The ultimate cause is loss of power of the muscles which normally engage in the rhythm. This loss depends on causes easily made intelligible, and therefore subject to correction through the understanding. The cause may be briefly stated as the employment of nutrition for the support of other activities, whereby it is withdrawn from the indispensable organic needs. The adequate support of the rhythmic and involuntary mechanism is thus rendered impossible.

There can be no doubt but wholesome activities secure an equal distribution of nutritive support to all the functions, according to the respective needs. Prolonged special activities of any part, the limbs,

the head, the nervous system, in any particular physiological department, superinduce relative excess of nutritive as well as functional support, entirely incompatible with the requirements of the neglected portions of the organism. These are allowed to languish; the muscles become lax and feeble, the nerves torpid or morbidly irritable, and have diminished wholesome influence.

This is just what happens in case of women suffering from affections pertaining to the contents of the pelvis. They flee to the physician to be relieved of the evidences of defective sustentation. But these are also evidences of defective use of parts on which the health and the position of the offending organs entirely depend; and there follows defective power of the muscles which are employed, involuntarily, night and day, in the rhythmic motions which have now become diminished in extent and direction. The muscles which perform the office have been insufficiently employed by the volitions. Their power can increase only by use. We are largely the architects of our own physiological destiny. We take the consequences of our acts and of our non-acts equally, whether advised or ignorant of consequences.

Women's energies are largely employed in other directions than those which even incidentally cultivate and maintain those portions of the body which normally engage in physiological rhythm. In some cases it is the cerebral activity which absorbs nutritive support to the degree of starving the abdominal muscles, so the motions of respiration fail to descend, but stop at the ribs. In others it is the habitual excess of the emotions that causes the same damage. In others, including probably the majority, the duties demanded by the social habits of our civilization call into use but few of the trunk muscles; the limbs may be disproportionately employed to the detriment of the indispensable organic rhythm.

In proportion as general muscular power diminishes the respiratory rhythm is restricted to the chest and fail to penetrate the mass of digestive organs, for whose advantage the motion is equally necessary.

The sad consequences of defective sustentation, in all their subordinate and derivative forms, are not at all difficult of prevention and cure. But the remedy must be applied to the causative factor.

SAFEGUARDS OF DENTITION.*

By GEO. B. PECK, A.M., M.D., PROVIDENCE, R. I.

WHILE dentition is a physiological process, human infants are *not* "natural organizations." Hence the development of an essential function is frequently attended with abnormal phenomena, which, if not promptly controlled, occasion serious pathological con-

ditions. No disease should be termed "children's" that is common to every age, nor said to be "incident to dentition," that does not belong thereto in the manner just indicated. These last are few, and those concerning which the general practitioner may properly testify are still less. They are identified chiefly by exclusion.

The following is a list of the chief disorders occasioned by dentition, with the relative frequency of indication of the most important remedies:

Cerebral Hyperæmia: Belladonna 23%, aconitum napellus 14%, gelsemium 10%, chamomilla 6%.

Convulsions: Belladonna, 21%, gelsemium and chamomilla each 10%, veratrum viride 6%.

Paralysis: Gelsemium and nux vomica are suggested with calcaria carbonica, belladonna, cocculus and zincum to be next thought of in this rare disorder.

Dysury: Belladonna 16%, cantharis 13%, lycopodium 11%, aconitum napellus 10%, apis 8%.

Diarrhæa: Chamomilla 20%, calcaria carbonica 13%, podophyllum 12%, arsenicum album 8%.

Emesis: Ipecacuanha 29%, arsenicum album 19%, calcaria carbonica 10%.

Cough (almost as rare as paralysis) may require belladonna, or possibly chamomilla or hyoscyamus or even ipecacuanha.

CLINIQUE.

STERILITY.

By MRS. E. G. COOK, M.D., CHICAGO, ILL.

THE causes which produce sterility are so numerous and varied that, in an article like this, it would be impossible to give details of treatment except for a single variety. Mrs. —, of Cincinnati, Ohio, had been under the care of prominent physicians in New York and Philadelphia for twelve years, for sterility. After undergoing several operations to reduce anti-flexion and to remove polypi from the internal mucous membrane, sometimes followed by metritis, confining the patient in bed to undergo the tortures attending that disorder, and many other varieties of treatment from the skilled and the quack doctors, she came into my hands four years ago this month. I found the flexion so sharp that there were adhesions of the inner os—or agglutinations is perhaps the word to express the condition of the mucous membrane at the beginning of each menstrual period. The breasts became sore, and uterine pains set in with terrible severity for days before a drop of flow appeared, unless the uterine sound was used. I began the treatment by dilating with sponge tents, using them daily for five days. The last one, when removed, had twenty polypi, from the size of a shot to

* Synopsis of a paper presented to American Institute.

a large pea, imbedded in it. Before it had time to contract I introduced a galvanic stem half an inch shorter than the cavity, and held it in place by pledgets of cotton dipped into a solution of carbolic acid and glycerine, one part acid to sixty of glycerine, or the phenic acid in same way. These applications were changed daily, and the stem removed and cleansed once in five or six days for seven weeks. The mucous membrane of the cavity was then smooth and healthy, and I changed the galvanic for a rubber stem, which was removed, cleansed and replaced once in from two to four weeks for one year. The cavity was washed out with a weak solution of arg. nit. once in three months (ten grains to one ounce of water) to insure against a return of the polypi. When the stem was removed for cleansing, for the first six months of treatment, the fundus gradually fell into the bladder, and when it was again introduced a sharp pain would usually occur when it straightened itself, or when the stem passed the inner os. But after this the resistance grew less and finally disappeared altogether. After carefully watching the case for fifteen months, she left my care cured entirely, but fearing a European voyage and a year's travel abroad might cause a renewal of her troubles, I advised the continued use of the rubber, giving it no care except a daily vaginal enema. Fifteen months ago I saw her and removed the pessary, and she became pregnant, and has now a boy six months old.

One reason so many failures occur is, in my opinion, want of patience, too vigorous and harsh treatment. It is not necessary to induce inflammation, or to give great pain, in caring for these cases. It has always been my habit to use glycerine and hydrastis or sanguinaria, applied at time of introducing either sponge tent or pessary, and to avoid too tight packing, and, most important of all, to establish the habit of a regular action of the bowels.

CEANOTHUS AMERICANUS IN "AGUE CAKE"

BY H. R. STILES, M.D., NEW YORK.

IN the summer of 1883, received a letter from a gentleman residing in Southern Illinois, wishing to know if we could cure his wife of "ague cake," or enlarged spleen, and stating the features of the case with sufficient accuracy to make it certain that this was the real nature of the disease.

Remembering certain clinical experiences given in Hale's "New American Remedies," we prescribed *ceanothus americanus* (Jersey tea), first decimal dilution, three drops three times a day, and the tincture for external application to the enlargement.

Within six weeks, the husband reported that "the ague cake proper, or that hard lump at the region of

the spleen, has disappeared; at least she cannot feel its pressure at present. During the taking of the medicine no attack of pain whatever has occurred, and her health has been perfectly good except weakness. Appetite good; moves about quicker; has more energy."

Three months later, the patient was reported as cured, and has remained so to time of writing. Subsequently, at our request, the following fuller history of the case was given:

"About my wife's troubles, would state that at the time we settled here, some thirty years ago, to within a few years, fever and ague in the fall and spring was almost as regular as a clock; my wife was particularly troubled with it. Six years ago she had an attack of unusual severity, with copious vomiting of bile, which seemed to defy all the usual remedies, and after she finally succeeded in stopping it, it left her with the ague cake or enlargement of the spleen, so she was worse off than before. From time to time she had very severe attacks, the pains were excruciating, caused, the physicians said, by gall stones forcing their passage. The former vomiting of bile in large quantities took place each time, after which she felt at her ease again until another spell came on; about every two months, rather more severe each time. Some of our physicians pronounced her trouble incurable, others said it was curable, but none succeeded. Then I wrote to you, and the remedies you sent relieved her at once. She felt better than for years, and was able to stand work as well as in her younger days, she being now 49, and to-day is as active as could be wished. She weighs now 116 pounds, having been reduced by the malady to 95 pounds. By degrees the cake disappeared, and she is as well as a woman of her years can expect to be."

Dr. J. C. Burnett speaks of it as a "splendid spleen remedy," recommending it in cases where there is a deep-seated pain in the left side, even where no tenderness or enlargement of the spleen can be diagnosed, and has found accompanying affections, such as leucorrhœa, etc., to disappear under its use with the pain itself. See his cases stated in the *Homœopathic World*, January and March, 1880, pages 14 and 121.

GALVANIZATION OF THE BRAIN, AND ITS VALUE IN THE TREATMENT OF CHOREA.—Charles L. Dana, M. D. (*Med. News*, Nov. 17th). After a detailed account of the effects of passing a galvanic current through the healthy human brain, and of the manner in which these effects are brought about, the author gives the notes of eight cases of chorea occurring in patients ranging in age from eight to fifteen years, and treated more or less systematically by cerebral galvanization.

The average duration of the treatment was twenty-five days, of the symptoms thirty-four days, against six and eight weeks in thirty other cases, treated chiefly by *arsenic*. Dr. Dana, however, does not base his belief in the efficacy of electricity so much upon the statistics of duration, as upon the fact—

which occurred too frequently for mere coincidence—that evident improvement in the symptoms followed each *séance*, and continued for twenty-four or thirty-six hours.

What is claimed for "anodal galvanization" is that it is a most valuable adjunct in the treatment of chorea; that if employed daily for a week or ten days, either with or without the simultaneous administration of arsenic, it materially shortens the duration of the majority of attacks occurring in children.

It is to be applied in the following way: A large sponge-electrode of flexible brass, two by four inches, is thoroughly moistened with salt water. The hair of the patient is also thoroughly wetted, and the electrode applied over the side of the head, above the ear. In hemichorea it need only be applied over the side opposite to the one affected. The other electrode is placed in the hand of the affected side. The electrode upon the scalp is made positive, and a stable current of the three to six Stöhrer's, four to eight Daniell's cells, is passed from three to six minutes.

IODOFORM IN CARDIAC AFFECTIONS.

DR. MARTINY (*Revue Homœop.*) calls our attention to the use of iodoform in cardiac troubles. He quotes from an essay by Prof. Bal. Testa, entitled, "Curative Action of Iodoform in Organic Lesions of the Heart," as follows:

Moleschott was the first to use iodoform in cardiac affections. He was led to its use after observing that in healthy individuals iodoform caused a marked increase in the force of the heart-beats, together with painful palpitations. How this physician was led to the curative action of the drug in affections of the circulatory centre we have yet to learn. But that which science does not explain, empiricism attempts to carry out, and it is certain that in two cases of functional disorder of the heart the medicine acted in a marvelous manner.

Dr. M. adds to this, "We see here to what circumlocation our old school confrères are lead in order to avoid mentioning the grand law of similars."

Iodoform causes painful palpitations in the healthy adult. We would naturally conclude that in small doses it ought to quiet similar palpitations, but the savants inquire very seriously how we can employ this remedy in circulatory affections. We again quote:

M. Testa had previously published two observations of mitral insufficiency, in which iodoform gave brilliant results. The present memoir refers to five cases. Before relating them we ought to say that M. Testa, convinced of the therapeutic value of iodoform, has experimented upon its mode of action upon the circulatory system.

All the animals submitted to its action presented a numerical reduction of the cardiac beats, with an increase in their force, and later an increased arterial tension. The doses employed varied from thirty to sixty centigrammes for the dogs; if the doses were increased the contrary effects were soon produced, that is to say, cardiac weakness and diminution of the arterial tension.

The first case was that of a man 39 years of age, whose face showed the cardiac distress, intense dyspnoea, oedema of lower extremities, pulse weak and irregular, beatings of the heart precipitous, marked murmur with the first beat, heard over the whole cardiac area, with maximum intensity over the upper portion, at the arch of the aorta, where another but lighter murmur could be heard with the second sound. With this there was a diffuse bronchial catarrh, hepatic engorgement and scanty urine with a sediment; there was evidently aortic stenosis and insufficiency. Prescribed seven cent. of iodoform in four pills, to take every two hours. Bouillon, porridge and milk.

No change on the morrow; same prescription. The intermittency of the pulse disappeared, the heart-beat more regular, general improvement manifest. Two other pills are added in the evening. On the next day the improvement was evident; the dyspnoea had diminished; the urine was more abundant.

The treatment was continued for nearly a month, when the patient returned to his work in good health.

Second, R. G., 40 years of age, rheumatic. Murmur with the first sound over the apex. Oedema of the ankles; mitral insufficiency with atheromatous degeneration of the arteries. Several hemorrhages which preceded may be considered symptomatic of the cardio-vascular lesion. Prescribed seven cent. of iodoform in four pills.

The hemorrhage occurred but once. Six days later the patient left the bed. Testa had several times noted the favorable effects of iodoform in hæmoptysis from cardiac origin.

Third, another case of mitral insufficiency in an old lady, suffering also with bronchial catarrh; same result as in the preceding case.

Fourth and fifth, two cases of mitral insufficiency with symptoms of pulmonary blood stasis and cardiac arrhythm, cured in a few days with iodoform.

As we see, the medicine praised by Prof. Testa exerts a salutary influence over organic lesions of the heart, or over the functional troubles dependent upon them, the lesions being incurable. By chance we have seen an article in the *Weekly Medical Review*, entitled "The Effects of Poisoning by Iodoform on the Heart, Liver," etc. This article refers to four cases of death in which fatty degeneration of the heart, liver and kidneys were present. The author reproduced, experimentally, these lesions upon rats, guinea-pigs and hogs, by injecting a weak oleaginous solution of iodoform, and produced as primary effect a parenchymatous inflammation of the heart, liver and kidneys.

The medicine ought to be used, then, with a certain degree of caution, at least until a larger number of facts shall have been observed, and especially in view of the fact of its rapid action, a rapidity which may become a source of danger, according to the particular susceptibility of the individual.

Dr. Martiny closes the article as follows:

In reading attentively this *résumé*, we must be convinced that iodoform has a powerful therapeutic action, since the facts related refer to troubles dependent upon grave organic lesions, in which the amelioration produced by the remedy was marked.

On the other hand, a toxicological glance proves that iodoform is capable of producing fatty degeneration of the heart, liver and kidneys; it can be classed then with arsenic, antimony and especially phosphorus, that heroic remedy in cardiac cachexias.—(T. M. S.)

THE USE OF CARDIAC TONICS.—Before the Liverpool Medical Association (*Med. Press*, Nov. 21, 1883), Dr. Logan read some notes of cases illustrating the use of the cardiac tonics—*digitalis*, *stropanthus*, *squills* and *convallaria*.

The observations were all made in the Liverpool Northern Hospital, on patients suffering from advanced mitral regurgitation. The notes were graphically illustrated by sphygmographic tracings taken before and after the administration of the various drugs, and by colored charts showing the pulse and breath rates, and the quantity of urine passed, also before and after the action of the medicine had taken place. His attention had been drawn to the great value of *stropanthus* whilst in Edinburgh, which as a cardiac tonic had shown itself superior to *digitalis* as usually administered. He thought it possible that, if the latter drug could be given after a more perfect method, its results might be much improved. With this object in view he obtained permission to treat a number of cases of mitral regurgitation with larger doses of *digitalis* than are usually given. His observations were made upon six cases. The *digitalis* was given in the form of the tincture in ten minim doses every hour, and continued from eighteen to forty-eight hours. The results were astonishing, after twelve doses the patient could sleep, the pulse fell and the urine immediately increased in quantity. After the pulse fell to normal, the *digitalis* was continued in ten minim doses twice daily. *Squills* given in the like dose and manner also effected considerable improvement, but showed itself inferior to *digitalis*. *Convallaria* was then tried. The results obtained were almost identical with those obtained from *digitalis*.

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"A regular medical education furnishes the only presumptive evidence of professional abilities and acquirements, and ought to be the ONLY ACKNOWLEDGED RIGHT of an individual to the exercise and honors of his profession."—Code of Medical Ethics, Amer. Med. Ass., Art. IV., Sec. 1.

Our practice is not "based on an exclusive dogma, to the rejection of the accumulated experience of the profession, and of the aids actually furnished by anatomy, physiology, pathology, and organic chemistry."

THE RETURNING WAVE.

VISITORS to Europe this summer have been compelled to confine their travels, in a great measure, to the north of Europe, the cholera having shut them out from the entire southern portion of the continent. The home-bound steamers have been filled not only with returning tourists but with many wealthy Europeans, who begin to understand that the Rocky Mountains and portions of the country in Alaska and around Puget Sound possess scenery far surpassing in grandeur and beauty anything of which Europe can boast. The glaciers in the vicinity of Puget Sound are far more wonderful than those in Switzerland, and the geysers in Iceland will not for a moment compare with those of the Yellowstone Park. The fishing and hunting are unsurpassed and the facilities for travel to these hitherto almost inaccessible portions of our country are every day improving. Notwithstanding the great advantage of an ocean voyage to many, there is no doubt but what many seekers after health will more surely find it among our own mountains and valleys and summer resorts than along the beaten line of travel and amid the dissipations and temptations of the crowded cities of Europe. Colorado Springs has become a great sanitarium for those afflicted with general nervous debility and certain forms of chest troubles, and in time other sanitariums will grow up in the mountain and valley regions of the great West, adapted to almost every form of chronic disease, where all the comforts of good

hotels, excellent society, and moderate prices can be had in abundance. The hot springs in the Rocky Mountains, such as those at Idaho, Wagon Wheel Gap, and a score of other places, have the advantage of a high elevation, absolute freedom from malarial influence, ease of access and excellent hotels. Those of Hot Springs, in Arkansas, and in Virginia, are known everywhere, but are situated at a lower elevation, and, when indicated, admirably meet the wants of the patient. There is no watering place in the world which will compare with Saratoga in the purity of the air, in the excellence of the hotels and the comfort of the guests, and in the variety and curative effects of the mineral waters. And yet the wonderful advantages of this place are only partially utilized. If a physician were connected with each of the prominent hotels, who had thoroughly studied the medicinal action of these waters, and whose duty it would be to give gratuitous advice to the guests as it regards when, how and what kind of waters to use, marking out at the same time, a course of diet and exercise, the benefits which the invalid or those seeking rest and strength would derive would be increased ten-fold. The same might be said of all the other mineral springs to which people resort for rest, pleasure, and cure of disease. Those requiring special treatment would, of course, place themselves under direct medical care, and pay the proper fees for the advice.

The expense of such a medical officer to the hotel would be comparatively trifling, while the benefit to the patient and to the finances of the hotel, by attracting guests and keeping them there, would render such an officer every way desirable.

It is very evident that the tide of travel is turning, and while many of our citizens will desire to visit the older civilizations, the historical scenes and works of art of the old world, thousands from Europe will cross the Atlantic to gain health and strength among the wondrous scenes of beauty and grandeur and the fountains of health of the Western world.

THE STATE BOARD OF HEALTH.

THE third annual report of the State Board of Health comes to us in the form of a volume of nearly four hundred pages, and shows the wide range of work and great usefulness of the organization. When in a population of 5,200,000, which is about the present population of this State, the number of

deaths amount to 100,000 yearly, we can readily see that the death rate is far beyond what it ought to be, and the great need for the continued and practical work of an organization supported by the State for the express purpose of bringing the lights of science and business energy to bear upon the great question of the public health.

New York loses annually about 38,000 by death, or thirty to 1,000—six per cent. of which is due to diphtheria. This disease, the report says, "is more widespread in this State than any other disease which requires quarantining and disinfection, and the Board has done much to call the attention of local boards to the best means of restricting its spread, and more especially to the best means of isolating those afflicted with it, and thoroughly disinfecting all known sources of contagion." In this connection we have a word to say in reference to our own city Board of Health. Perhaps in no city in the world has an organization accomplished, in so short a space of time, so much good and remedied so many evils as our city Board of Health. Its power is almost unlimited, and fortunately it had as its head, for some years, in Dr. Chandler, a man of a rare combination of scientific and executive ability. In every new house the drainage and the plumbing must be in accordance with the plan previously approved by the Board of Health, which has the power of sending its officers into any house, old or new, and compelling such alterations to be made in the plumbing, drainage and ventilation, at the expense of the owner, as will insure fresh air and freedom from sewer poisoning. Among the most powerful auxiliaries in this good work has been *The Sanitary Engineer*, which, backed by money, brains, and untiring energy, has waged a determined warfare against the shams in food and the death traps which existed almost everywhere.

Of course it would be impossible to eradicate all the evils which, through cupidity and ignorance, have crept into our community through several generations in a few years, but very much is being accomplished every year. A sharp eye, through sanitary inspectors, is kept upon tenement houses, which in former times were the hot-beds of disease; stale fruit and vegetables and tainted meat are carted away, and a strong effort made to secure clean streets. Adulterated milk has almost entirely given place to rich, pure milk, fresh from healthy cows, to the great saving of

life among children. The result is a healthier population and a marked decrease of the death rate.

The utmost pains are being taken, both by the city and State Board of Health, and with the most satisfactory results, to crush out small-pox, in former years so fatal. This is done by systematic isolating the cases and systematic vaccination. So much of the vaccine has proved unreliable that the Board recommends that none be used except bovine virus which has undergone the most careful inspection.

Twelve per cent. of the whole number of deaths in the State are estimated to arise from pulmonary consumption, and the Board suggests that one fruitful cause of this disease and its fatality arises from the limited amount of air space and air supply in the common schools of the State. As new school houses are built they are constructed upon more scientific principles, but the Board does well in exercising its power in the direction of the old buildings.

There are in the work several very interesting and valuable reports from prominent engineers in reference to drainage in certain localities in mitigating the prevalence of malarial diseases. As an illustration, the drainage of certain abandoned canals in Chemung and Schuyler counties has materially reduced the cases of malaria in the vicinity. The work is full of interest and shows what well-directed effort can accomplish in preventing disease and how the best scientific labors are utilized to secure the desired results.

THE GARFIELD AND NATIONAL HOSPITAL.

A STRONG effort has been made, by some of our friends in Washington, to unite the Garfield Memorial Hospital and the National Homœopathic Hospital in one organization. Garfield and his family were believers in the doctrines of the new school of medicine, which differs from the old school in being in practice non-partisan and non-sectarian. It seems eminently proper that a hospital erected as a memorial to one who has occupied so distinguished a place in the history of his country, a national hospital located at the nation's capital, should, in spirit, be as broad and God-like as that of the man in whose memory it is erected and whose name it bears. It should be non-sectarian, the home of enlightened thought and advanced scientific investigation. We deplore the introduction in its connection of the terms

homœopath and allopath. They are sectarian names and keep up a partisan spirit, and yet neither represent the spirit or practice of the new or the old school. Why not, then, discontinue them as the distinctive name of schools, leaving to both the utmost freedom of thought and scientific and practical investigation? It may be possible that in a great city like Washington there are a sufficient number of men to be found in both schools so advanced in thought, and free from partisan spirit that they would be willing to stand side by side in the wards of a great hospital, toiling with clear eye and unfettered spirit, more for success and less for party. If this is impossible, then let there be two hospitals, separate and distinct, with separate medical boards and separate governing bodies, but we beg of our friends to organize, if they are compelled to stand alone, not for a day, but for all time. To organize not in a sectarian spirit, not with a sectarian name, but as a national hospital, which shall always stand in the forefront of progress, and always be worthy of the great name it bears.

THE ELECTRIC LIGHT AND PUBLIC HEALTH.

THE electric light offers an important aid to the solution of the question of furnishing pure air in artificially lighted rooms.

Previous to the introduction of the electric light, the combustion of the oxygen of the air was absolutely necessary to the production of light in any artificial manner.

It is claimed that, if burned to give a light equal to that of twelve sperm candles, burning one hundred and twenty grains an hour, cannel coal gas would vitiate two hundred and seventeen cubic feet of air each hour; common gas, three hundred and forty-eight; sperm oil, three hundred and fifty-seven; benzole oil, three hundred and seventy-six; sperm candles, six hundred and fifteen; wax candles, six hundred and thirty-two; and tallow candles, nine hundred and thirty-three.

As the electric light does not require any of this oxygen for its production, it is evident that its use will save for other purposes a vast volume of oxygen, and thus one of the points of providing pure air is easily settled, and will manifest an influence upon the public health.

When it is realized that a single gas jet will con-

sume as much oxygen as half a dozen persons, the importance of this single point will become more apparent, to say nothing of the injurious vapors which are thrown off in the process of combustion, particularly in the form of the deadly carbonic acid gas.

There are many other reasons why the electric light should be preferred, such as the saving of smoke, soot, unconsumed gas, a vast amount of steam which is ready to condense on the first cool surface it meets, the sulphurous acid, with its manifold deleterious effects, and last, but not least, the risk from ignition of surrounding objects.

The immense increase of possible illuminating power of superior quality, is another element for consideration in our estimate of the value of this wonderful invention, which is entitled to the further credit of saving vision by means of its brilliancy and the purity with which it sheds its white light.

Considered in all its bearings, then, we may set down the electric light as a great improvement over any previous illuminator, and one which should have due credit as a promoter of the public health.

HONESTY VS. DECEPTION.

THE recent meeting of the "American Institute of Homœopathy"—the sectarian title by which this organization seems proud to be styled—from what we can gather, was managed much after the usual plan of sensational sentimentalism!

It has long been the practice for a few men to load their guns to the breech with this sort of ammunition, for the purpose of discharging on this occasion.

It was after this style that the President, in his address, forestalled an imaginary attempt at a discussion of the desirability of changing the name of the association at this session, and we are told that the sentiment was applauded.

And thus the question was disgracefully disposed of, but not as has been hinted, by frightening off the anticipated leader of the movement. We are positive that no such attempt was intended, and had there been, it would not have miscarried in consequence of the sensational sentimental utterances of a professor in a college which boasts its own sectarian title.

The fact is, and has long been, that the meetings are managed by a clique who make the most out of these opportunities for personal aggrandizement.

Show us a single original fact that has ever devel-

oped from this source, and observe how ready they are to put down anything that interferes with their pet schemes!

If an earnest, honest man dares to offer a question for debate, he is liable to be sat upon by these medical politicians—who run with the machine brought out for election purposes, under the marshalship of the leaders before mentioned—and so insulted that he never will be found in such company again!

The American Institute of Homœopathy has outlived its period of usefulness, and the sooner it ceases to exist the better it will be for the profession at large.

It is natural that "homœopathic colleges," "homœopathic publishers," "homœopathic pharmacies," "homœopathic life insurance," "homœopathic cocoa," etc., etc., *ad nauseam*, should fight for the distinctive name, without which they would become extinct, but for a society which pretends to discuss scientific subjects, nine-tenths of which have no relationship to the distinctive title which it flouts in the face of the public, to continue such a name savors of that deception which, we feel sure, many of our colleagues would not be willing to perpetuate, should they look at the subject in its true light!

We say, then, emphatically, that truth and good sense demand that societies which profess to include medicine as a *whole* in their discussions, should abandon the cognomen which would restrict them, and be known as what they are, viz., MEDICAL!

If any choose to confine themselves to the discussion of homœopathy alone, there can be no objection to their so announcing through a name, but let it be understood that they are what they claim to be, as you would expect of any other similar society, as, for instance, the "Pathological Society," the "Surgical Society," etc., etc., and thus escape the charge of being deceivers and humbugs.

This question is too important to be ignored, or to be manipulated by the money-changers and others who live by the deceit which is covered by a misunderstood or ill-defined word.

The independent physician who lives by honest toil, and does not depend upon the "loaves and fishes" which may come through sectarian influence, must rid his "school" of the ethical looseness which now prevails, and insist upon that respectability which any refined society will tolerate, and then he may ex-

pect to be received on an equality by the great body of scientists.

It is to this class that we confidently look, and we feel sure that our appeal will not be in vain.

INTERNATIONAL MEDICAL CONGRESS.

THIS body, which has just closed its session at Copenhagen, after a week of continued work, has been, both in number and ability, an entire success. The gathering was exceedingly brilliant and noteworthy, including the King and Queen of Denmark, the King and Queen of Greece, the Consul of State and sixteen hundred members, very many of whom had reached marked distinction, both in scientific and literary work. There were about fifty Americans present and representatives from nearly every country in Europe. The papers were many of them of marked ability, showing extensive scientific research.

DIPHTHERIA STATISTICS.

DR. WINDELBAUD, of Berlin, contributes an article in the June number of the *Zeitschrift des Berliner Vereines Homœopathischer Aerzte*, on "Diphtheria Statistics," based upon the reports of the members of the Berlin Society of Homœopathic Physicians. He attempts to show the inefficiency of old school methods, and the superiority of the homœopathic treatment of the disease, especially in the use of *apis*, *belladonna*, and cyanide of mercury, without external applications, and no applications to the throat except gargles of red wine and water.

Dr. Sulzer, of Berlin, contributes the following results:

In 79 cases of undoubted diphtheria merc. cyan. 3 and *apis*, 3, in rapid alternation, were employed in 32 cases, with one death from catarrhal pneumonia. In 45 cases merc. cyan., 9-12, mostly the tenth dilution, was employed.

There were 16 cases of laryngeal diphtheria, with five deaths. Scarlatina complicated 14 cases.

In one case death was due to scarlatina hæmorrhagica, the diphtheritic deposit having disappeared. One case taken with great laryngeal stenosis was turned over to the hospital for tracheotomy (recovered). In two cases death occurred within 24 hours. In two cases death followed laryngeal complications, in spite of treatment with merc. cyan., 10. In one case death was caused by paralysis of the heart.

There were thus six deaths directly due to diphtheria, of which three were not under treatment 24 hours.

Dr. Burkhardt, of Berlin, adds a report of the treatment of 91 cases, with six deaths, a percentage of 6.5.

The remedies most frequently used, barring croup and other complications, were merc. cyan., 3d dec., and *apis*, 3d dec., in hourly alternation. In one case the brilliant results of ars. on the heart's activity must prove of interest. Bromine gave the best results in croup, that is, for want of a better remedy, as too much must not be expected of it. As no dilutions were accessible, no definite attenuations of the drug were used. To a vial of distilled water a sufficient quantity of a watery, sat-

urated solution of bromine was added to give it a straw or golden-yellow color and given directly in this form.

Dr. Kleinschmidt, of Berlin, reports 22 cases treated, 13 children and nine adults. Of these cases five were complicated with scarlatina, and one with croup. The case of croup and one of scarlatina died. The rest recovered in from three to six days; one only was prolonged to two weeks.

In ten cases apis, 3d dec., and merc. cyan., 3d dec., in from one-half to one hour alternation, were employed, in conjunction mostly with warm poultices and gargles of spir. vini in water. In two cases apis, 15 cent., two drops every two hours, was employed with good results.

In the others merc. cyan., 4-6 dec., cured rapidly in four days. The use of merc. cyan., 15, did not succeed well, for though the general condition improved the deposit remained the usual time with no lessening of the paralysis of the soft palate.

Dr. Fischer, of Berlin, reports eight cases with one death, using mostly apis, 3, every one, two or three hours, according to the urgency of the symptoms. There were no external applications, and gargles of pure warm water only when the patients were able to gargle.

Dr. Träger, of Potsdam, reports 72 cases treated, with four deaths, a mortality of 5.50 per cent. With one exception, cases complicated with croup died. The only case complicated with scarlatina died. Merc. cyan., 5th decimal dil. (with rectified spirits), was employed, five drops every two hours, without distinction of age. In a croup complication, hepar benefited, while bromine, 3, and merc. bijod, 3, gave no results.

Dr. Windelbaud contributes, in an elaborate table, his results in 194 cases with only seven deaths, a percentage of 3.6. There were nine cases complicated with croup, five of which died. Of nine complications of scarlatina none died. The treatment consisted almost entirely of apis and merc. bicanatus, or bell. and merc. in alternation. In cases of collapse, arsen., 3; in croup, iod., 2, brom., 2 and hepar, 2. No external medication, and only gargles of red wine and water, alcohol or brandy.

In conclusion, the author remarks that none of the adduced 194 cases left a doubt as to the diagnosis of genuine diphtheria. All cases of simple angina and follicular disease were omitted. All showed a gray, greenish-yellow, or dirty reddish-gray deposit, mostly offensive, with marked disturbance of the general system.

While these statistics seem to have been most carefully collected, and to have been based on careful diagnosis, we must remember that the diagnosis of genuine diphtheria is often a most difficult one. Follicular disease of the tonsils and throat, when engrafted on a strumous diathesis or on constitutions enfeebled by any deleterious influences, may assume an adynamic form and lead to an erroneous diagnosis of diphtheria. Even the paralysis of the soft palate, once supposed to point indisputably to diphtheria, has now been found to follow, at times, simple catarrhal inflammations of the pharynx. We are not of those whose diagnosis of diphtheria rests upon the recovery or death of the patient, but we do look upon the disease as a most serious one, taxing all our best therapeutic and hygienic efforts. Dr. Windelbaud's results, showing but seven deaths in 194 cases, seem almost too good to be true. Such a mortality places diphtheria among the simple diseases.

BIBLIOGRAPHICAL.

THIRD ANNUAL REPORT OF THE STATE BOARD OF HEALTH OF NEW YORK, 1883. Pp. 380.

We have received, through the courtesy of Dr. J. Savage Delavan, of Albany, one of the Commissioners, a copy of this valuable report, which was transmitted to the Legislature, March 12, 1883. It will form an important addition to our literature in this department, and will help to keep our file complete, as we are pleased to do. This Board has done most efficient service thus far, and we hope and trust that it may continue.

THE THERAPEUTICS OF INTERMITTENT FEVER. By H. C. Allen, M.D., University of Michigan. Philadelphia: F. E. Boericke, 1884. Pages 344. Octavo.

The first edition of this work was issued in 1879. It has stood the test, and now we have the second, with the addition of "some leading characteristics of each remedy and a complete repertory."

We think the title would have been more correctly stated as "Some Therapeutics," etc., as it does not claim to include the means employed by the great majority. By this we do not mean to detract from the value of the labor done in the least. The text seems to be concisely written, the clinical cases in illustration well selected, and the book, as a whole, ought to enable us to individualize drugs more closely. No one who studies *Materia Medica* in this way can afford to be without it. The physical part of the work is in the well-known style of the publisher.

THE AMERICAN HOMŒOPATHIC DISPENSATORY. By Theo. D. Williams, M.D., member of the Illinois State Pharmaceutical Association; Active member of the American Public Health Association; Attending Gynecologist Cook County Hospital, etc. Chicago: Gross & Delbridge. 1884. Pages 698, with an appendix of fifteen pages.

The number of pages embraced in the publication before us is an evidence that the number of drugs employed by the so-called homœopathic school is rapidly increasing, and that the demand for information which does not strictly belong to this class of practitioners is becoming more apparent, and is getting to be appreciated by those who make it a business to furnish these supplies.

The author of this work conscientiously admits that the authority of issue should rest with a body higher than the tradesman, and excuses the efforts which his publishers had solicited, on the ground that the American Institute of Homœopathy had abandoned the publication of such a work. The most important divisions of the work are as follows:

Description of utensils used in pharmacy, explanation of the several processes employed in preparation; alphabetical arrangement of the common names used, with synonyms, pronunciation, etc.

One of the special features which characterize this work, and which, to a certain extent, accounts for its length, is the enumeration under each drug, of the several preparations employed, with explicit directions for each, instead of the plan adopted in all other similar works, of referring to stated classification to be found elsewhere.

There can be no doubt that this method will be found much more convenient, especially to those who are not familiar with the special manipulation required, and the increased size and cost of the volume will be overlooked.

The work is evidently that of a master hand, and will undoubtedly be of great service to such as may require it.

The publishers have done their part, as usual, in the best style, and are to be congratulated for their enterprise in issuing so great a work.

CHOLERA AND ITS PREVENTIVE AND CURATIVE TREATMENT.

By D. N. Rây, M.D., L.S.A. (London), Attending Physician to the Dispensary of the New York Homœopathic Medical College, and to Wilson Mission Dispensary, New York. With an introduction by T. F. Allen, A.M., M.D., Prof. of Materia Medica and Therapeutics in the New York Homœopathic Medical College, President-Elect of the American Institute of Homœopathy, etc., etc. New York: A. L. Chatterton, Publishing Company. 1884. Pp. 128. 12 mo.

This work is a short condensation of what is already known of the affection of which it treats.

"HOOPER'S VADE MECUM," in two volumes, are the May and June issues of Wood's Library of Standard Medical Authors. In some of its editions this remarkable work has been the favorite text book of more physicians during the past fifty years than any other work. Revised and improved from time to time, it has always occupied a favorite place in the library of the physician, from its clear and reliable statements and the easy and graceful style in which they are presented. This edition is printed from the tenth English edition, and has been thoroughly revised.

The *North American Review*, for September, discusses the following subjects with its usual ability: "Basis of Popular Government," "The Exclusion of the Chinese," "Political Economy," "The Demand of the Industrial Spirit," "Inspiration and Infallibility," "The Need of Liberal Divorce Laws," and "Our Remote Ancestry."

The *Century Magazine*, for September, aims especially at providing, in great variety, suitable reading for the summer months. Professor S. P. Langley, the well known astronomer of the Alleghany Observatory, begins in this number a series of popular illustrated papers on "The New Astronomy." In this first article, the character and significance of "The Spots on the Sun" are explained with the aid of numerous pictures.

An essay of extraordinary importance to political science in this country is Joseph Edgar Chamberlin's analysis of "The Foreign Elements in our Population," with interesting conclusions as to the foreign character of the population of certain sections of the country now and in the near future. The Rev. Newman Smyth contributes a thoughtful paper on "The late Dr. Dorner and 'The New Theology.'"

In "Topics of the Time" will be found editorials on "The Political Education of the People," politicians as "Sheep and Goats," "Art and Congressmen," and "The New Astronomy."

SOMETHING TO BE REMEMBERED.—Decoction of *quassia*, applied to mosquito bites, constitutes an excellent remedy for the relief of the itching and irritation. When applied to the exposed portions of the body it is also a preservative against the attacks of these annoying insects.

RECTAL WATERING.—Dr. Gofford suggests (*Miss. Valley Medical Monthly*) that when the stomach of a fevered patient rejects water, for which his system is craving, it should be administered per enema, and he reports two cases in which this procedure was satisfactorily resorted to.

CORRESPONDENCE.

OUR LONDON LETTER.

MESSRS. EDITORS:—Dr. Hughes is among us once more, looking all the better for the hospitality of his late entertainers. We are glad that he is able to bring back with him the good news that an agreement as to the best plan for revising the *Materia Medica* has been arrived at. This is the first great step; we have now to see how the plan will work. This will depend, in great measure, on the "work-extracting" talent of the editors, as applied to their assistants; and your correspondent can answer for Dr. Hughes. There is no man so ready as Dr. Hughes to set people to work, and it is very hard to refuse such a worker as he is himself. I think we have now a fair prospect of seeing the *Materia Medica* placed on a solid basis.

There is a decided abatement in the cholera epidemic. The visit of this disease has not shown the character of Southern France and the neighboring nations of Spain and Italy in a favorable light. Complete loss of head and wild rushing to ridiculous measures of quarantine and fumigation is not an elevating spectacle. The bacillus continues to attract a great deal of notice, but its significance is still highly problematical. It was enough, however, to create a scare in the French Académie de Médecine. A sample had been sent from Marseilles, and the Secretary was about to open the box and exhibit the interesting microbe to the learned assembly, when he was greeted with loud cries of "don't"—and so he *didn't*! As regards treatment, no advance has been made. "Regular medicine" has as many expedients as the fox in the fable, while homœopathy, like the cat, has its one rule, which is worth infinitely more than them all.

Mrs. Weldon has given all "mad-doctors" a salutary lesson. With astonishing skill and perseverance, she has fought suit after suit and has at last scored all round. The verdict against her in the Weldon *vs.* Winslow case is upset, and a new trial ordered. She has gained an action against Dr. Semple, one of the certifying doctors, damage £1,000. She has proved conclusively to the world that the laws of lunacy are in the greatest need of revision—that two or three careless men, if they happen to be doctors, are able to rob any one of liberty and confine him, or her, in the most horrible of all kinds of confinement—being shut up in the society of the insane.

The "Medical Acts Amendment Bill," which was to give a uniform standard of examination for all candidates, is lost for the year. In consequence of the prospect of an early rising of parliament, this with many other measures has been sacrificed, and thus the obscure "College" and "Halls,"—*derniers resorts* of the "chronic" medical student—will have another lease of life.

Yours fraternally,

JOHN H. CLARKE, M. D.

15 St. George's Terrace, Gloucester }
Road, London, S. W., Aug. 1, 1884. }

THE PROPER METHOD OF HANGING.—A writer in the *British Medical Journal*, discussing the best position of the noose, says: The "subaural knot" was merely a hangman's ignorant idea, and had no support from anatomy. Results have proved that an eight foot drop, with "submental knot," will produce a greater destruction of the transverse processes of the cervical vertebrae, than a fourteen-foot drop with the "occipital knot."

The transverse processes have been fractured as far down as the fourth vertebrae, and death is, of course, instantaneous, and that without risk of taking off the head.

OBITUARY.

GEORGE VANDENHOFF, JR., M. D.

"My darling died last evening at half-past six." Such was the brief telegraphic message from a mother, as she sat in the early dawn of the morning by the still form—cold and silent now—which had held her only son, George Vandenhoff, Jr., M. D., whose spirit had passed to its higher life the evening before, August 10, at Bennington, Vt., in the twenty-seventh year of his age. His early life had been so watched over by a mother's undying love and ceaseless care that it had been full of sunshine, and the generous and almost womanly sympathy of his nature, combined with rare physical beauty, had made him a favorite with all. After completing his course of study in both the literary and medical departments of the New York University, he entered upon the practice of his profession with all the enthusiasm and hope of his nature. That nature, however, was so warm in its sympathies, identifying itself so thoroughly in heart and soul with the sufferings with which he was brought in contact and suffered so keenly from the narrow limits of human skill in relieving disease, that he soon withdrew from it, entering one more congenial to his nature—the drama—in which his grandfather, his father and mother had won such distinguished renown. He entered Mr. Daly's company, noted for the excellence of its material, and at the time of his death was rapidly taking a front rank as a brilliant delineator of those pictures of life in which its brightness and sparkle, its warm and tender feelings, and its human sympathies were brought out in all their strength and delicate shadings. His mission was not to startle by the grandeur of magic power, but with a nature womanly in its sympathies, and its almost intuitive analysis of character and its quick appreciation of the beautiful, to make life brighter, happier and better by the living pictures of dramatic art. As a physician, he would have reached distinction, but his medical studies were peculiarly useful to him in the higher walks of dramatic art upon which he was entering.

TRANSLATIONS, GLEANINGS, ETC.

HEMATURIA.

By PROF. R. ULTMANN, OF VIENNA.

Translated by W. Storm White, M. D.

PART I.

WHEN blood, mixed with urine, flows from the urinary apparatus, we call the condition blood urination, or hæmaturia. Under the so general diagnosis, we now understand merely a symptom which appears in a great number of the diseases of the urinary apparatus, sometimes with more, sometimes with less, violence. The chapter of the hæmaturia, as far as the diagnosis is concerned, is assuredly one of the most difficult in medicine. Altogether, the phenomena are in such manner similar, that sometimes no hold can be obtained for a differential diagnosis. Only to the advances in the microscopic and chemical investigations of the urine and its sediments are the thanks due for the fact that a great number of the diseases, which have hæmaturia in their courses, can be diagnosed with certainty. Yet there remains a small number of diseases with bloody urine, which cannot be recognized with certainty, in spite of all the aids of science. On this latter ground we must be satisfied to adhere to the general diagnosis of hæmaturia until we are able to verify the

special diagnosis for each of these similar forms of disease. In the following, the endeavor will be made to specialize the hæmaturia, and all the expedients will be presented which are calculated to lead to an exact diagnosis. It is just this chapter, in the different hand and text-books, which appears to be exceedingly erudite, and the different practical observations and manifold urinal analyses given can, not unaptly, be called diagnostic *expedients*. At the end will be given a few therapeutical hints, which have originated from personal observations on the patient.

Before commencing the classification of the hæmaturia, the recognition of blood and blood coloring matter in the urine will be more closely considered.

Urine containing blood has either a blood-red, brownish-red, black, or finally, a greenish-brown color.

Urine is colored blood-red which contains unaltered blood corpuscles in the sediment and oxyhæmoglobin in solution. It shows relations such as appear when blood is mixed with urine in a suitable vessel. The blood-red color is a sure indication that the blood has not been long mixed with the urine, and usually appears in bleeding from the larger vessels. A similar coloration of the urine, which could easily cause mistakes, appears after the internal use of *rheum*, *senna*, and other similar plant-coloring matters, if the urine at the same time reacts alkaline. This red color of the urine often disturbs the patient in no small degree. This condition is more frequently seen in old men affected with hypertrophy of the prostate and catarrh of the bladder. Such patients desire to keep the bowels free, because of the pain in the hypertrophied prostatica, and demand a cathartic from the physician. If *rheum* or *senna*, particularly *rheum*, be prescribed, it must not be forgotten to tell the patient not to become frightened if the urine acquires a blood-red color, as it originates from the medicine. If this warning be forgotten, we will occasion him unnecessary anxiety.

The determination that we have to do with plant-coloring matter (*rheum*, with *chrysophanic acid*) in such cases is very easy. Take an acid—best *nitric* or *hydrochloric*—(common *acetic acid* can also be taken when necessary)—and pour so much of it into the blood-red urine, while stirring the latter, that the red color is replaced by a pale yellow. If a pale yellow color appears on the addition of an acid, we can assume with certainty that the blood-red color originated from plant-coloring matters. The counter-test is to make the urine, decolorized by acid, again alkaline by pure alkali (*potassium*, *sodium* or *ammonia*). As soon as the alkaline reaction sets in the urine resumes its blood-red color. If such urine be tested with *nitric acid* for albumen, none will be found, or only in small quantity, corresponding to the amount of pus from the catarrh of the bladder, whereas if the blood-red color of the urine depends upon blood-coloring matter, albumen must always be found in appreciable quantity.

Urine which is colored red by blood precipitates the albumen in brownish flakes on the addition of *nitric acid*, and is not decolorized to a light yellow.

If a spectroscope is at hand, the distinction can be made much quicker, as urine which contains oxyhæmoglobin shows two dark bands between Fraunhofer's lines *D* and *E* (in the yellow and green of the spectrum), while a urine which is colored blood-red after the internal use of *rheum* shows no bands at all. On the contrary, the whole spectrum is dissolved up to the red.

Urine is colored brownish-red and dark (black) brown which contains blood corpuscles in the sediment and methæmoglobin (Hoppe-Seyler) or deoxydized hæmoglobin in solution. The

alterations in the blood corpuscles in urine containing methæmoglobin will be more particularly described in speaking of the forms of hæmaturia.

Brownish-red or black-brown colored bloody urine always indicates that the blood has been retained a longer time mixed with the urine in the urinary apparatus. This tone of color also usually indicates a bleeding from the smaller vessels, or a parenchymatous hemorrhage. The brown tint originates thus: The urine, at the temperature of the human body, slowly abstracts the oxygen from the blood, and especially from the oxyhæmoglobin, by which they are deoxydized and transformed into brown or black methæmoglobin.

Similar brown urine occasionally appears with *icterus*, when the biliary coloring matter are so far altered that no "green" can be obtained by the usual tests for them.

Such urine contains neither bilirubin nor biliprasin, but has apparently a further oxydation product of these coloring matters (bilifuscin and bilihumin) in solution. It contains no albumen, or not in such a quantity as must be presented in correspondence to a like amount of blood-coloring matter. Observed with the spectroscope, the two characteristic bands of hæmoglobin are lacking. Also, a mixture of one part of English H_2SO_4 with two parts of the urine produces an untransparent deep black liquid. Similar urine also occurs in *carbolic acid* poisoning, such as sometimes appears after a too energetic antiseptic treatment of wounds. In this condition, however, the urine has a peculiar greenish-black tint, which lacks all traces of red, and which will never be seen in black bloody urines, for the latter always display a reddish tint when seen in thin layers. Carbolyzed urine either contains no albumen or only a trace. Viewed with the spectroscope, the lines of hæmoglobin are lacking, and if two parts of the urine be intimately mixed with one part of H_2SO_4 until the mixture boils, the characteristic odor of *carbolic acid* will be plainly developed.

Dirty, reddish, yellow color is shown by urine which contains besides blood corpuscles also other cellular elements in considerable quantity. Thus the urine in parenchymatous nephritis has not unfrequently a dirty, flesh-solution-like appearance. Only strongly alkaline urine which contains blood and pus in considerable quantity shows a *greenish-brown* tint. Blood can be recognized when in solution in the urine, as well as when in the sediment. The following tests can be made with the filtered urine:

1. With the *spectroscope*. Fill a test-tube half full with the clear, filtered urine and hold it before the slit of a good spectroscope. If blood (hæmoglobin) is in solution, two dark bands will be seen in the yellow and the green of the spectrum, between Fr. lines *D* and *E*. The band in the yellow is usually somewhat smaller than the second one, in the green. It is advisable to compare this with a very dilute solution of blood (one drop of blood to one-half test-tube full of distilled water). If the bands appear in the same places in both, there can be no doubt that it is blood which is present in the urine. A spectroscope which shows at the same time an illuminated graduated scale on the spectrum, permits the recognition of the dark bands with the greatest nicety. Reduced hæmoglobin (methæmoglobin) shows, between the lines *D* and *E*, in the yellow of the spectrum, only one dark band, which, however, appears much broader. At the same time, especially when unaltered hæmoglobin predominates in the urine, the above described two dark bands always appear in urine which presents a dark brown or black-brown color.

2. *Heller's test* for blood coloring matter. Fill a test-tube one-third full of the urine to be examined, add one-half a volume of concentrated *liquor potassæ* (1:3) and heat over the

flame. By warming the urine, the earthy phosphates precipitate with the alkali as a basic salt in fine flakes, and mechanically carry the blood-coloring matter with them, which imparts to them a characteristic color. Earthy phosphates precipitated from normal urine by *liquor potassæ* appear white or grayish-white, but if blood coloring matter be present they appear as rust-colored flakes. If the earthy phosphates be allowed to form a sediment, they will be found as a blood-red or rust-colored cloud lying in the bottom of the tube. Thin layers of these clouds frequently show dichromatism. Earthy phosphates must be added to the warm mixture if the urine to be tested originally reacted alkaline, and all the earthy phosphates had been precipitated in the sediment, which can be known when, in spite of warming the mixture of urine and *liquor potassæ*, no flakes appear in the *eprouvette*. This is best accomplished by adding half a volume of normal urine. The earthy phosphates of the added urine will precipitate and carry the blood-coloring matter with them. If a plant-coloring matter (after internal use of *rheum*, *senna*, etc.) is present, the earthy phosphates will also be colored red, and in single cases this coloration of the salt is so similar to that of blood that one who relies on this test alone may err. As corroboratory, neither the test for albumen nor that for vegetable coloring matter must be forgotten; for blood-coloring matter is never found in the urine without the possibility of, at the same time, recognizing albumen by the *nitric acid* or heat test. If no albumen be found by these tests, the red color of the earthy phosphates does not arise from blood-coloring matter. The clear liquid which lies above the red earthy phosphates in the test-tube may also be used for the albumen tests. The corroboratory test for vegetable-coloring matter, on the other hand, consists in the fact that the urine becomes blood-red on the addition of an alkali, and pale yellow by an acid. The earthy phosphates, which precipitate by warming urine with an alkali, moreover, possess the property of carrying foreign coloring matters of the urine with them; so they appear dark reddish-yellow, gray in the urine of high grade of fever, and brown in urine which contains bile-coloring matters.

3. *The test for hæmin crystals* (after Teichmann) is best made with the sediment of the urine, which should be collected on a filtering paper. Take a small quantity of the brownish sediment from the filter with a knife blade and spread it out on a glass slide. Then carefully heat the slide till the sediment is completely dry and cannot be wiped off with the finger. Then take a little Na. Cl. and crush it on the slide near the sediment to be tested, until finely pulverized, and then spread it over the dried sediment, pressing it down with the flat side of the knife blade. The finest particles of the Na. Cl. will remain sticking to the dry sediment, and the latter will appear as if slightly covered with dust. Now blow away the excess of salt, bring a drop of glacial *acetic acid* onto the sediment by means of a glass rod, then add a hair, a cover-glass, and allow *acetic acid* to flow, drop by drop, under the latter until it begins to float. This accomplished, hold the slide with a pair of pincettes, or merely with the fingers, over the flame until the *acetic acid* begins to bubble up under the cover-glass, that is, until it begins to boil. Then remove the preparation from the flame and add *acetic acid* by drops so long as it continues to evaporate. When the acid no longer disappears from under the cover-glass, and the slide becomes cool, examine it with a power of three hundred diameters under the microscope. Small, elongated rhombi, which represent Teichmann's hæmin crystals are found in great number among the colorless residue of superfluous salt, when the sediment contained blood or blood coloring matter. They appear in different sizes, mostly single, yet sometimes as simple and compound "twin" formations.

The latter form at an angle of sixty degrees at their point of junction. If the crystallization is incomplete the blunt angle of the rhombus is rounded off. If one proceeds in this manner, using sediment thoroughly dried on the slide and good *glacial acetic acid* (the crystals can never be obtained with *ac. acet. concentr.*) this test will never fail.

In default of a sediment, as can occur in hæmoglobinuria, the fresh albumen coagulatum prepared by heat can be manipulated for hæmin crystals in the same manner as is done with the sediment of the urine. The red earthy phosphates, as they are given by Heller's test, cannot be used for the hæmin test, as they have suffered a further change by heating with the potash solution.

4. The discovery of red blood corpuscles in the sediment with the microscope, even when isolated ones only can be found, can, in some cases, be laid down as the surest and best means of recognizing blood in the urine.

Hemorrhage appears in three forms in the urinary apparatus, viz :

- (a) As hæmoglobinuria (hæmatimuria after Vogel).
- (b) As parenchymatous hemorrhage ; and
- (c) As violent hemorrhage, caused by the rupture of the larger vessels.

I. *Hæmoglobinuria* is characterized by the fact that the blood-coloring matter, already in a soluble condition, has gone over from the blood into the urine. The urine has thereby a reddish-brown or brownish-black tint, and sometimes varnish-like appearance. Even after being allowed to stand for hours, no sediment containing blood corpuscles is thrown down. It permanently retains its red-brown color because all the blood-coloring matter is in solution. The reaction is usually acid and the sp. gr. lessened. The urine can hold a large quantity of blood-coloring matter in solution. Sometimes brown colored (hemorrhagic) epithelium and brown molecular detritus are found in the sediment. Blood corpuscles are not to be found.

II. *Parenchymatous*, or capillary hemorrhage, also presents a red-brown or brownish-black tint, and holds large quantities of blood-coloring matter in solution, but is differentiated from pure hæmoglobinuria by its precipitating a sediment consisting of blood corpuscles. The appearance of the blood corpuscles, as they occur in parenchymatous bleeding, are characteristic. They do not appear in the usual disk form with the central depression, or in the mulberry form, as they are seen in the blood, but are spherical and of different sizes ; so that along side of a spherical corpuscle of normal size we may find those which are only one-half or one-third as large, or even rod-shaped. Sometimes these blood corpuscles appear brownish, bleached, or completely colorless, like little vesicles. Sometimes they can only be seen very indistinctly and by exact focusing. The brownish color of the small blood corpuscles seems to be dependent on the deoxidized hæmoglobin, in contradistinction to the yellowish-red color of the normal corpuscles.

The spherical blood corpuscles of different sizes, which have often lately been shown in the blood in different diseases, and which have sometimes been described as microcytes, because of their smallness, and at others as macrocytes, because of their abnormally large size, have long been known and also depicted and described in the urine with parenchymatous bleeding, because they are characteristic of a capillary or parenchymatous hemorrhage in the urinary apparatus. (See "Anleitung zur Untersuchung des Harnes v. Ultzmann u. Hoffmann," first edition, page 85, and the "Atlas der Harn-Sedimente," plate xxxiv. No. 2, 1872. Published by Wilhelm Braumüller, Vienna.) This appearance of these so dif-

ferently formed blood corpuscles is most probably brought about by the blood's being retained for a long time at the temperature of the human body, mixed in small quantities with proportionately much urine, in the urinary apparatus.

The urine, which is only a solution of substances belonging to retrograde metamorphoses, and whose gases are principally carbonic acid and nitrogen, acts in such a manner on the blood corpuscles at thirty-seven degrees C., that is, the temperature of the human body, that it at first extracts the oxygen, and through this the corpuscles change to a brownish color. It is after this that the reaction from urea takes place, which consists in this : the blood corpuscles break up into large and smaller spherical bodies. Therefore these can only be seen in the sediment when a small quantity of blood has been mixed with the urine at the temperature of the body. These conditions are usually met with in capillary or parenchymatous hemorrhage, and from this the appearance of the above-described corpuscles is highly characteristic.

III. Hemorrhage which arises from the rupture of larger blood vessels in the urinary tract give the urine a light red, or by much more severe hemorrhage, a dark red color, similar to that of venous blood. The reaction of the urine is neutral, or not unfrequently alkaline, from the prevailing alkali of the blood. The urine does not always hold the blood coloring matter in solution in large quantity, from which it becomes apparent that we may often see considerable sediment, over a finger's breadth, consisting of blood corpuscles when the urine has precipitated its sediment, and above it a pale wine-yellow urine. The red sediment consists of normally-shaped and colored red blood corpuscles, in contradistinction to the brownish spherical ones of parenchymatous hemorrhage. All the corpuscles appear under the microscope as normal discs with central depressions and of the same size. If they stand on edge they appear bi-concave. They are usually separate, only rarely coming in the money-roll form. The mulberry form appears only in rare instances, when the urine is strongly acid, concentrated, and rich in mineral salts.

That the corpuscles do not exhibit any change in form, as they do in parenchymatous hemorrhage, is due to their not having been detained long enough mixed with the urine in the urinary apparatus, and therefore the urine has not had an opportunity to work destructively upon them.

Such conditions appear when we have profuse bleeding in the urinary tract, as, for example, the rupture of a varix at the neck of the bladder, when blood in large quantity all at once enters the bladder, the latter being unduly expanded and with extraordinary rapidity, presses to an immediate or early urination (emptying) ; or the bleeding may be in the urethra, or pars prostatica urethrae, as, for example, in catarrhal ulceration or fissures in the neck of the bladder. In this latter case, although there is but little blood to be found, this small quantity was first mixed with the urine on micturition, and therefore the latter could not work destructively on it, and the blood corpuscles are found perfectly normal in size and shape in the sediment.

The above-described forms of hæmaturia can as well proceed from the bladder, ureters, pelvis of the kidney, the kidney itself, and finally from the pars prostatica, neck of the bladder, or urethra. The practical physician would receive but little aid from the exposition made so far, for he is expected to endeavor zealously to discover the place from which the hemorrhage occurs.

In the following will be specially considered all those indications which can be turned to the discovery of the locality of the hemorrhage.

LOCATION OF HEMORRHAGE.

From the form and variety of the hemorrhage, after a close examination of the patient and of the urine, we can distinguish the following localities of the hemorrhage :

1. Hemorrhage from the urethra, as far as the pars prostatica.
2. Hemorrhage from the neck of the bladder.
3. Hemorrhage into the bladder.
4. Hemorrhage from the pelvis of the kidney, or from the kidney.
5. Hemorrhage from the urinary apparatus taken as a whole.

I. *Hemorrhage from the urethra* is differentiated from all the remaining varieties of hematuria by the blood continually flowing from the urethra without being first mixed with the urine. This is so much the more possible when the locality of the bleeding lies anterior to the sling-formed ant. sphincter. In such cases, fresh, moist blood stains may be seen on the patient's linen, and one or more drops of blood can be pressed out from the urethra. Urging to urinate is not present if there is no complication with an affection of the bladder. Let the patient urinate in two vessels and it will not unfrequently be seen that the first portion will contain blood in a fluid condition, as well as long, worm-like bright red coagula, as thick as a lead pencil, while the urine following in the second vessel may be perfectly normal. If retention of the urine be at the same time present, and it is necessary to introduce a catheter, the same appearances are presented, only with the difference that the coagulum gives a cast of the bore of the catheter, when it is voided through the latter. It will always be found that blood is in the first half of the urine, while the second half is completely free from it. It is here necessary to remark that, when the catheterization is difficult, and it takes a long time to bring the catheter into the bladder, the coagulated blood may stop it up in such a manner that no urine flows, though it may be well into the bladder and may be moved freely in all directions. In such cases an aspiration with the syringe is indicated, by which the coagulum may be removed and free passage given to the urine. Usually this phenomenon is only presented when the bladder has become paralytic, when the *vis a tergo* is lacking to force out the urine, which would otherwise drive out the coagulum.

Bleeding from the urethra, especially of a light grade, is sometimes seen in acute gonorrhoea (the so-called Russian clap), sometimes in chronic gonorrhoea (urethritis granulosa), in urethritis of mechanical and chemical origin, and phlebitis in the pars prostatica urethrae. In these cases the bleeding is usually accompanied by the discharge of more or less pus. Extensive hemorrhage in the urethra may be caused by ruptures from instruments in catheterization (fausses routes), by repeated forced coitus, by extremely vascular urethral polypi, and especially by urethral neoplasma.

II. *Hemorrhage from the neck of the bladder*, that is from that part of the pars prostatica urethrae, which is situated near the bladder, has the characteristic that the urine is generally passed as normal at first, and becomes blood colored at the end of micturition, when the sphincter vesicae begins to contract. Sometimes only the last drops of the urine which flow from the urethra are bloody. The blood corpuscles all appear normal in shape and size, as in hemorrhage from the urethra, without distinction as to whether there be little or much blood mixed with the urine. As distinguishing it from urethral hemorrhage, we lack the continual dribbling of blood from the urethra, and also we are not able to press out a drop with the fingers. If a catheter be passed into the bladder, the urine flows off free of blood, and the hemorrhage only commences upon removing

the catheter. This indicates that the hemorrhage has its site within the sphincter vesicae externa. The urine is turbid, and presents the characteristics of catarrh of the bladder of the first or second grade. Urging to urinate is present, and the pain comes mostly at the end of micturition, while the drops of blood are passing. These appearances are not unfrequently seen in the fifth or sixth week of a gonorrhoea, when prostatitis or catarrh of the bladder complicates the disease. The bleeding is usually very limited, and only at the end of micturition. The blood, mixed with the urine, hardly lends a reddish color to the latter. Ulcerations at the neck of the bladder are most probably the cause of the hemorrhage. The duration of this form of hemorrhage is from three days to two or three weeks. Its course is usually free of fever, only with more violent hemorrhage, when the urine is at the same time colored red, do we find a light grade of fever. In this latter case, we always have a second grade of catarrh of the bladder, and the urine is alkaline in the fresh condition, and contains pus. These conditions form the boundary between this and hemorrhage into the bladder proper. There are also hemorrhages in the neck of the bladder which originate from deep-seated ulcers or fissures of the neck, which are particularly worthy of mention because of their great painfulness. The aetiology of the diseases of the bladder (neck) is obscure. The complaint often developed in vigorous-appearing persons without any cause. Some of them have never complained of any disease of the genital or urinary organs. Its course is generally chronic; the condition becomes worse and worse, because cysto-pyelitis and later nephritis are added to the bleeding from the neck of the bladder, and finally the patient dies with all the phenomena of uremia. The characteristic of this disease is its great painfulness. This is not only present during or at the close of micturition, but it gradually becomes permanent. The patient anxiously avoids all bodily movement, passes most of the time in a horizontal position, and even in bed will carefully assume only a position flat on the back. The attempt to take a side position causes him the most intense pain in the neck of the bladder and penis. Patients compare this pain to the cutting and sticking of a red-hot knife. Out of bed, they move slowly around the room with bent back and retracted abdomen. The urging to micturate often comes every hour, or half hour, and the pain at the end of urination, when the blood begins to flow drop by drop, is so great that they gnash their teeth and scream. The urine usually reacts acid, sometimes, however alkaline. It shows the properties of a cystitis or of a cysto-pyelitis.

Blood and pus corpuscles will always be found in the sediment in large quantity, yet never formations from which we can determine the presence of a neoplasm. If such a patient be examined with a sound it will glide in quite easily as far as the bulbous. Here, however, where it has gradually to pass through the muscular and prostatic portions of the urethra, we meet the greatest impediments, which are to be overcome only by patience and perseverance. As soon as the apex of the sound enters the region of the sphincter externa, the patient becomes frantic with pain. At this instant we see that there is a severe spasm of the ext. sphincter, which may be so strong that it is utterly impossible to enter the bladder with a soft instrument (catheter of vulcanized rubber). The entrance is only possible with a thick metallic sound by slow and steady pressure. If the instrument is released from the hand before it has entered the bladder, it will forcibly shoot out from the urethra.

In a case which was treated for a long time with metallic sounds, and which had thereby become somewhat more tolerant, an endoscopic examination was made by my colleague, Dr. Grün-

field. This showed redness and tumefaction in the pars prostatica, and two deep fissures in the region of the neck of the bladder. By taking successive views of the different parts of the neck of the bladder, he saw, instead of a series of uniform rings representing the central opening, those which showed deep depressions in two directions. Neither a stone nor any foreign body was ever met with in the bladder.

The hemorrhages are very different in these complaints; sometimes very limited, at others very profuse, yet always most profuse at the end of micturition when the sphincter of the bladder comes into play. All the patients (I have observed four) have to resort to injections of *morphine*, without which, they declare, they cannot live because of the pain.

Besides these, hemorrhages from the neck of the bladder appear with pipe-stem calculi, and especially with the formation of concretions in the pars prostatica. Further, also, in consequence of catheterization, when it must be carried out regularly and daily for some time, in cases of paralysis of the bladder, or of prostatic hypertrophy; also in prostatitis, and finally, in new formations in the prostate and neck of the bladder.

A FEW ANALYTICAL STATISTICS CONCERNING CALCULUS.

THE following figures are tabulated from an article written by Prof. Ultzmann, of Vienna, entitled "Ueber Harnsteinbildung."

TABLE I. CALCULI VESICÆ (SOLITARY).

FROM THE COLLECTION OF	Total No. of Calculi.	Uric.	Earthy Phos.	Oxalates.	Cystin.
Dumreicher's Clinic.....	90	28	41	18	3
Bilroth's Clinic.....	162	80	48	34	.....
Dittel's Clinic.....	56	23	24	9	.....
Vienna Pathological Museum...	65	33	24	8	.....
Prof. Brücke's Clinic.....	68	26	14	28	.....
Prof. Ultzmann's Clinic.....	104	34	34	33	3
Totals.....	545	224	185	130	6
Per cent.....		41.1+	33.9+	23.8+	1.1+

In the foregoing cases, the nuclei were as shown by Table II:

TABLE II.

NUCLEI OF:	Oxalate of Lime.	Uric acid.	Phosphates.	Cystin.	Foreign bodies.	Not noted.
Calculi of Urates, 224.....	23	189	1	.....	.....	2
Calculi of Oxalates, 130.....	5	4	121	.....	.....	.....
Calculi of Phosphates, 185.....	11	106	45	2	18	.....
Calculi of Cystin, 6.....	.....	.....	.....	6	.....	.....
Total: 545.....	5.6	80.9	8.6	1.4	3.3	0.3
Primary Calculi, 480.....	6.4	91.8	.....	1.6	.....	.....
Secondary Calculi, 65.....	.....	.....	.....	.....	.....	.....

MULTIPLE CALCULI VESICÆ.

The following four cases were of primary formation of calculi, and originated in the kidney:

- 14 calculi of oxalate of lime and uric acid, nuclei of uric acid.
- 19 " " uric acid and earthy phosphates, nuclei of uric acid.
- 24 " " " " nuclei of uric acid.
- 16 " " " " and earthy phosphates, nuclei of uric acid.

The following four cases were of secondary formation, and commenced in the bladder:

- 6 calculi of earthy phosphates with blood coagula as nuclei.
- 11 " " " " soft phosphatic nuclei.
- 7 " " " " " " " "
- 30 " " " " " " " "

RENAL CALCULI.

Small.

- 300 calculi of uric acid, nuclei of uric acid.
- 6 " " oxalate of lime, nuclei of uric acid.
- 4 " " " " " " oxalate of lime.
- 6 " " cystin, nuclei of cystin.

Large.

- 4 calculi of uric acid, nuclei of uric acid.
- 1 calculus of oxalate of lime, nuclei of uric acid.
- 2 calculi of phosphates, nuclei of uric acid.
- 2 " " " " phosphates.

URETHRAL CALCULUS.

These are usually merely renal calculi, which have become lodged in the urethra or in the sinus prostaticus, and there received secondary layers. Only five cases reported:

2 oxalate of lime, nuclei uric acid.	
3 urates, nuclei uric acid.	
480 solitary primary vesical calculi with 441 uric acid nuclei.	
73 multiple " " " " " "	73 " " "
319 small renal " " " " " "	306 " " "
9 large " " " " " "	7 " " "
5 urethral " " " " " "	5 " " "
886 calculi with	882 " " "

or 93.8 per cent. of primary calculi have their origin in uric acid.

Ages at which calculus appears; 5,383 cases:

Under 10 years of age, 1,936	
From 10 to 20 " " " "	943
" 20 " 30 " " " "	460
" 30 " 40 " " " "	336
" 40 " 50 " " " "	322
" 50 " 60 " " " "	513
" 60 " 70 " " " "	517
" 70 " 80 " " " "	199
Over 80 " " " "	17

SYPHILITIC NEURALGIA.—Prof. Seeligmüller read a paper on this subject at the Fifty-sixth Versammlung Deutscher Naturforscher which recently met in Freiberg.

Neuralgia, he said, which are certainly related, etiologically, to constitutional syphilis, are nothing like so uncommon as would be supposed on reference to the literature of the subject. He does not refer, of course, to the cases of neuralgia following syphilitic periostitis, or to the osseous pains, but only to those cases in which the pains occur along the tracts of nerves. Such cases have been observed by Fournier in the course of the supraorbital and sciatic nerves. Seeligmüller has also observed them in the course of other nerves, as the intercostals, the brachial plexus, and the great occipital.

Lately he has observed, it seems, a very typical localization of syphilitic neuralgia in the head, and certainly along nerve tracts, which were formerly supposed to be cases of isolated neuralgic affections in unusual places.

In these cases the pains were spontaneous, as though pressure had been made along a track two or three fingers wide, and which extended on both sides from the ear upward to the top of the head. He has further seen cases in which the pains were confined to a limited zone and to the course of sensitive nerves, as the auriculo-temporal and small occipital.

There was no middle-ear disease in any of the cases.

The time at which the neuralgic affection comes on after syphilitic infection varies from two to fifteen years. The treatment is, of course, antisyphilitic.—*Deutsche med. Wochenschr.*, October 24, 1883.

CONGESTIVE HEADACHE.—NICKEL.—After a number of experiments Dr. J. M. DaCosta decides that the *bromide of nickel* is more effective in the congestive form of headache than any other preparation of *bromine*. Its dose is from five to seven grains.

DENTAL HYGIENE.—To produce and maintain good, sound teeth, the work must commence with the mother. The child too, must be nourished with food containing all the elements found in teeth.

Milk contains all the elements necessary for the growth and development during infancy. It is important that this nourishment should not be robbed of any of its lime, if good teeth are expected. Nearly all food adapted to man's subsistence contains the necessary elements for the growth of the bones and teeth. Unfortunately, advanced civilization renders it fashionable to sift from our cereals the outer coatings of grain, especially of wheat, which alone contains all the calcium or lime elements found in the grain, and so necessary for the growth of teeth. Modern improvements in milling render it unnecessary to allow coarse bran to enter into pastry, in order to get the benefit of the Graham flour, which in former years was so unpalatable. Though sold under the name of Graham flour, and possessed of all the elements of former times, it is now objectionable only in color. When the real merits of Graham flour, oatmeal, and other articles of food which contain the natural phosphates, come to be appreciated, sensible people will greatly increase the demand for such preparations.

Food must not be allowed to remain around and between the teeth till it ferments and becomes an acid. Avoid extreme use of lemons and strong acids.

Rinse the mouth after eating acid fruit. See that teeth are properly cleansed during any illness. See that tartar or lime does not form around the necks of teeth, as it inflames the gums and eventually causes the teeth to loosen and fall out.

Urge cleanliness and frequent watching of the teeth under your care, so will you benefit your patients and honor your profession. — Dr. S. B. PALMER; *Independent Practitioner*, May, 1884.

CALCIUM SULPHIDE IN THE TREATMENT OF DIABETES MELLITUS.—Within the past ten years so-called *calcium sulphide* has been recommended by several observers as a valuable drug in the treatment of diabetes mellitus. Dr. N. C. Husted, who was himself afflicted with this disease, made a complete and lasting recovery by using the drug in connection with appropriate hygienic treatment. The doctor has since employed it with satisfaction in other cases of diabetes.

Dr. Austin Flint, Sr., has prescribed the remedy, along with suitable diet, general management, etc., in several cases, which progressed favorably.

Dr. C. H. Lellman gave *sulphide of calcium* with remarkably good effect in a single case occurring in his service at St. Francis' Hospital, in 1880.

I have used the drug in only three cases. In one, it produced no effect whatever. In the others, improvement began and recovery took place during the administration of the remedy.

One-half and one-quarter of a grain, three to five times daily, were the doses prescribed, together with iron, a diabetic diet, and regular exercise in the open air.

In the first case, improvement commenced in two weeks, but the sugar did not entirely disappear until six weeks after treatment was begun.

In the second case, benefit was unquestionable at the end of three weeks, and no sugar was detected after one month of treatment. The patient with whom *calcium* failed took the drug faithfully for one month.

Although *calcium* is certainly not a specific in diabetes, yet it seems worthy of a trial in persistent cases of this distressing disease. — Dr. C. M. Cauldwell, *New York Medical Journal*, April 5, 1884.

THYMOL.—F. E. Stewart, in *Weekly Drug News*, says:—We have used *thymol* solution successfully in wounds and ulcers, and prefer it to *carbolic acid*. In many instances patients cannot bear the odor of *carbolic acid*, especially in uterine lesions. *Thymol* has a pleasant odor, and its use leaves nothing to be desired. Have used it altogether lately, in uterine fissures, abrasions, ulcers, and with most excellent results, destroying the fetor at once, and hastening the repairing process.

Thymol camphor is a more powerful antiseptic than *carbolic acid*, and is easier made into ointment than *thymol*. Lately I have used this solution: *R*, *thymol*, *gum camphor*, *hydrate chloral*, aa $\frac{3}{4}$ j; rub in a mortar until liquefied, add $\frac{3}{4}$ iv alcohol and shake in a bottle; now add $\frac{3}{4}$ iv *glycerine* and $\frac{3}{4}$ xxij water; shake thoroughly. This forms an almost perfect solution, of a milky color, aromatic odor and pungent taste, neutral, sp. gr. 1.040. The solution may be reduced with water or *glycerine*, or both, *ad libitum*, and used in all surgical or gynecological cases requiring such dressings. It is a preferable solution.

Conclusions: 1. *Thymol* solution cannot be prepared strong enough to cauterize. *Thymol* in substance (feebly) cauterizes.

2. *Thymol* solution destroys fetor instantly and effectually.

3. *Thymol* solution leaves the grateful odor of *thymus vulgaris*.

4. *Thymol* solution heals wounds and ulcers more rapidly than *carbolic acid*.

5. There is no danger of toxic symptoms following the use of *thymol* solution, and it is as safe as *carbolic acid* administered internally.

JEQUIRITY IN THE TREATMENT OF GRANULAR EYELIDS.—Summing up his experience gathered from the study of sixty-five eyes (fifty in the Chicago Eye and Ear Infirmary, and fifteen in private practice) which he treated with *jequirity* from July to November, Dr. Hotz expresses it in the following propositions (*Chic. Med. Jour. and Ex.*, February, 1884):

1. *Jequirity* is the best-known remedy for the chronic granular conjunctivitis.

2. It is the most effective remedy for the clearing of trachomatous pannus, and in inveterate forms of pannus it is preferable to peritomy, as well as to the inoculation of blennorrhæal virus, because it does its work quicker than the operation, and safer than the inoculation.

3. It has no injurious effect upon the eyes, and can be used with perfect safety, even when the cornea is extruded.

4. But it should not be used while the cornea and conjunctiva are acutely inflamed.

5. It does not benefit those cases of chronic conjunctivitis in which the symptoms of catarrh (increased secretion, succulence of the retro-tarsal folds, etc.) predominate over those of trachoma (enlarged papillæ and lymph-follicles, plastic infiltration of tarsal conjunctiva).

6. The most violent attacks of *jequirity* ophthalmia accomplish the speediest cures of granulated eyelids and the quickest clearing up of the vascular cornea.

A WORD AGAINST JEQUIRITY.—It seems that Parisot and Galezowski (*Recueil d'Ophthalmologie*, August, 1883) have not succeeded as well with infusions of *jequirity* in the treatment of granulations as Wecker and others have. They obtained their infusion of the beans from the same pharmacist who furnished Wecker with his infusions; and they employed it with rigid regard to the directions given by Wecker, but they produced only negative results. Moreover, they think that this method of treatment is not without danger to the cornea, which may be even entirely destroyed.

SUB-MUCOUS INJECTIONS OF CHLOROFORM.—M. Guilot, (*Le Prog. Med.*) following the advice of M. Dop, has been using, for six years, the injections of chloroform for severe dental neuralgia, where there is no repose, day nor night, for the patient. He believes the chloroform to be preferable to injections of morphine, since the latter requires some minutes for its complete action. He inserts the canula of a Pravaz syringe about two and a half centimetres into the sub-mucous tissue.

The gum and buccal mucous membrane easily accommodate themselves to the chloroform. He has used the chloroform in injections not only in cases of odontalgia with hyperæsthesia of the pulp, but also as a lotion, five to six drops in a glass of water, to quiet the pains following the extraction of a tooth. With this same lotion he has arrested excessive hemorrhage due to the same cause. The tumefied, bleeding gums rapidly resume their normal condition under the local use of the chloroform. With the exception of an acute smarting and a sensation of heat, which soon disappear, there is no injurious results from the use of the chloroform, while the relief experienced by the patient is prompt and gratifying.—T. M. S.

PATHOLOGICAL RESULTS OF LONG ENGAGEMENTS.—The defendant in a recent breach of promise case in Ohio, based his defence on the fact of the development of a fibrous polypous tumor in the uterus of his betrothed. This would seem to be a valid excuse for a man's not marrying a woman, but the plaintiff claimed that the growth was produced by the protracted courtship, causing her to brood upon the prospects of entry into married life. It was proved by experts that prolonged courtship is harmful, superinducing a condition of erethism, and the jury awarded the plaintiff a verdict of \$3,000 as a balm for her wounded feelings and polypoid uterus.—*Medical Age*.

THE PREVENTION OF HORSE ACCIDENTS.—Mr. C. C. Baird, of the Dick Veterinary College, Edinburgh, has invented an India-rubber frog-pad for fitting into the heels of the shoes of horses, with the view of preventing the animals from slipping and falling on the causeway. The invention is exceedingly simple, and will be of great value to medical men and others who drive horses, especially on asphalt and in frosty weather. The pad can be removed in the evening and replaced in the morning. A set of pads, it may be added, is expected to wear out two sets of shoes. The trial of the invention, we believe, has fully borne out the statements of the inventor as to the merits of the apparatus.—*Medical Press*.

EUCALYPTUS IN GANGRENE OF THE LUNGS.—Dr. Bonamy relates the case of a man, about 50 years of age, who was admitted to hospital suffering from cough, dyspnoea and fever. A few days after admission the fetid odor of his breath became so extreme that it was necessary to separate him from the other patients. There was dullness in the axillary line on the left side over the middle portion of the lung. At this point there was tubular respiration, and crepitant râles were audible at the end of inspiration. The sputa consisted of a black matter, detached portions of which were swimming in an abundant serous fluid. The cough was incessant, and the odor intolerable. A diagnosis was made of gangrene of the lung of superficial extent. The patient was first put upon a mixture containing *carbolic acid*, but no improvement following, this was replaced by *tincture of eucalyptus*. In two days after the last prescription the odor of the breath was much less offensive, and in less than two weeks the patient was cured.—*Le Courrier Médicale*, Aug. 18, 1883.

SANITARY INFLUENCE OF PERFUMES.—Mr. Rimmel, the well-known perfumer, in a recent lecture before the members of the Hairdressers' Guild, maintained that scent was a powerful antiseptic and disinfectant, besides fulfilling the duty of a tonic. Besides destroying the animalculæ frequently developed from the germs of infection ever present in the atmosphere, perfume also neutralizes noxious gases. Mr. Rimmel recommended the following as the best disinfectants, viz.: *eucalyptus*, *lavender*, *rosemary*, *thyme*, *peppermint* and *pennyroyal*, particularly the first named, which he described as an antidote invaluable in cases of fever and bronchitis. In England vegetable remedies have to a very great extent been superseded by mineral ones; but in France and other continental countries the rose, violet, etc., are still greatly valued for their curative effects.

MISCELLANY.

—In *The Sanitary Engineer*, for July 10, A. Hamon, of the French Society of Hygiene, contributes an article on the use of lead pipes for water supply. In France, since 1862, the use of lead pipes for beer, wine, cider and other liquids has been forbidden. In 1879 the use of lead in tinfoil, used in wrapping cheese, chocolate, tea, in the glazing of earthenware, and in closing the holes in millstones for grinding flour, was also prohibited. The layer which forms in the pipes is generally carbonate of lead. Though almost insoluble in pure water, it is readily dissolved in water containing ammonia salts, nitrites, nitrates, and organic matter, substances rarely absent in potable water. When the lead pipes are alternately exposed to the air and water the corrosion of the lead is more rapid. In provision for drainage and water supply, the use of large pipes of cast-iron, of lead tubes for upright lines and branches, and of copper taps induce galvanic currents which aid the attacking of the lead by the water. It requires but an infinitesimal amount of lead in the drinking water of daily use to induce lead-toxication. In 1882, in Raque, the use of lead pipes for the distribution of water was forbidden. In 1876, the International Congress of Hygiene also forbade the use of lead pipes for water.

—The proposed change in the place of meeting of the American Institute to New Orleans seems to have for a basis much the same consideration as the recent invitation to Deer Park, viz., *business!* The Exposition Company seems to be at the bottom of it, and not the profession.

—The English government have appointed a commission, consisting of Dr. Klein, F.R.S., and Dr. Heneage Gibbes, to proceed to India and study the cholera. They are expected to act in with an Indian cholera commission recently appointed.

—Cholera is on the decrease in Europe, and so complete has been the quarantine regulations here that there is no prospect of its finding entrance into this country this year.

—The French Government, after careful investigations, have confirmed the correctness of M. Pasteur's theory as to a preventive of hydrophobia.

—Crude oil of turpentine is said to be an antidote to phosphorus, the oxygenated portion of it entering into combination with phosphorus acid.

—Dr. Morrell Mackenzie, of London, recommends for psoriasis a drop of nitric acid in a tumbler of water, taken in swallows at short intervals.

—Serpentaria, topically applied, is the latest remedy in rhus poisoning.

—Toothache is said to be relieved by chewing cinnamon bark.

—The New York Charity Hospital has provided special wards for its phthisical patients.

—Dr. Strong reports 848 patients treated at the W. I. Hospital, for July, with 27 deaths or 3.18 per cent.

—Henry Watts, the editor of the "Encyclopædia of Chemistry," and of the later edition of "Fowae's Chemistry," died June 30.

—The fall meeting of the Medical Society of Northern New York will be held at the City Hall, Albany, Wednesday, October 1, 1884.

—Governor Cleveland has vetoed the bill appropriating \$35,000 for the purpose of enlarging the Middletown asylum for the insane.

—It was a good pathologist who gave three reasons why his patient could not get well, but it was a better who against all reason rescued him.

—Erasmus Wilson, LL.D., F.R.S., the eminent surgeon and dermatologist, died in London, August 9, 1884, at the age of seventy-five years.

—Judge Van Brunt has rendered sound judgment in sustaining the Commissioners of Emigration in their effort to prevent the landing of paupers at this port.

—Col. J. J. Woodward, M.D., U. S. A., died on August 18, after a long illness. He will be remembered especially for his faithful attendance upon the late President Garfield.

—The sixteenth annual prospectus of the Woman's Medical College of the New York Infirmary, has been received and will be found of service to such as are interested in its subject.

—The writer of our Institute letter, published in our last, desires us to state that he had no intention of casting any reflection upon the indefatigable chairman of the Committee on Railroad Fares.

—Mr. Sampson Gamgee gives the following advice to surgical operators and dressers: Cultivate light touch as an art; probe without thrusting; cut without bruising; separate without tearing; manipulate without mauling.

—The Edinburgh University has most worthily conferred the degree of LL.D. upon our esteemed colleague, Dr. For-
dyce Barker, an honor which the profession at large can appreciate, and of which all will feel proud.

—Sir James Paget describes the pattern healthy man as "one who lives long and vigorously, who in every part of his life, wherever and whatever it may be, does the largest amount of the best work that he can, and when he dies leaves healthy offspring."

—It has been settled that the next meeting of the International Medical Congress shall be held in Washington, in accordance with the formal invitation extended by Dr. Billings, of the United States Army, in behalf of the American Medical Association. Berlin, St. Petersburg, and other cities, were competitors for the honor.

—A Pacific slope doctor has sought public prominence through the announcement of his intended exhibition of some Chinese lepers, which he claims to have in his charge. Thus far, we learn, only the photographs have appeared. There seems to be two objects in view with this enterprising individual: first, of course, his own aggrandizement, and second, to help increase the antipathy to a harmless and worthy people.

—Prof. Frerich has just been elevated to the rank of a noble. He is the fifth professor upon whom this rank has been conferred in Prussia, the others being B. Von Langenbeck, Ranke, Dr. Lauer, Physician to the Emperor, and the great physicist, Helmholtz.

—The 37th annual announcement of Hahnemann Medical College of Philadelphia contains pictures of the new college and hospital buildings now being erected. We congratulate the college faculty upon their success in so excellent an undertaking and one which will enable them to afford students as good accommodations as can be found anywhere.

—In the *American Journal of Obstetrics*, for May, Dr. Bauer warns the profession against regarding the metrorrhagia at or just before the change of life as one of the freaks of the menopause, since cancers are found most frequently at that age, and an early diagnosis is necessary for surgical interference.

—The Board of Health's officers are prosecuting a vigorous warfare upon enemies of the public health, whether found in the impure water used in the manufacture of vile mineral waters, in the vending of decaying fruits, or in various other ways in which the unprincipled seek to swindle the public. There is yet a vast field for this enterprise.

—Dr. John L. Moffat, Secretary, announces that the State Homœopathic Medical Society will hold its thirty-third semi-annual meeting at Binghamton, Sept. 9th and 10th next, for the consideration of scientific subjects only. Arrangements as to transportation, etc., have been made and will be communicated by addressing the Secretary, No. 17 Schermerhorn street, Brooklyn.

—The Brazilian newspapers have recently announced the death, in the Province of Goyar, of *Senhorinha Gomes di Jesus*, at the age of 154 years. Though there is, perhaps, no irrefutably authentic evidence of the exact figures, the statement cannot be *a priori* rejected, when one considers the frequency in that country of persons attaining the age of 110, 120 and 130 years.

—All sorts of occasions are now resorted to for advertising physicians, and each locality has a plan peculiar to itself. In some it is "Health Talks, for Young Men Only," in others it is "First Aid to the Injured," or perhaps "Bible Talks," by some eminent medical man! Good taste and modesty make it important that the physician should be especially careful how he allows his name to be used for any purpose.

—The judgment which was rendered over a year ago, in New York, by Justice Van Vorst, at Supreme Court, special term, against the "United States Eclectic Medical College," depriving the institution of its charter, was affirmed in May, 1883. From that judgment the defendants appealed to the Court of Appeals, and the latter has just handed down a decision affirming the judgment. As the attorneys for the "Buffalo College of Physicians and Surgeons" stipulated to let the case against that school abide the event of that suit, the decision disposes of both these colleges.

—Dr. B. H. B. Sleght has located at No. 8 South street, Newark, N. J. Dr. J. W. Bechtel has removed from Harrisburg, Pa., to Staunton, Va., where he is acquiring an excellent practice. Dr. J. Burling has removed to Summit, New Jersey. Dr. J. M. Foster, late of the House Staff of the Ward's Island Hospital, having spent over a year in Europe, will settle in New Orleans, to practice his specialty, diseases of the eye and ear. Dr. W. A. Dewey is located at No. 920 Geary street, San Francisco, and joins Hahnemann College as one of the Professors.